

#### THE MURAL DECORATIONS OF THE INDIANAPOLIS CITY HOSPITAL

Scheme of Decoration Unique Except for Hospital in France—A Gift of Love from the Citizens and Artists of Indiana—Beauty Becomes Integral

Part of the Hospital

BY ETHEL CLELAND, LIBRARIAN, BUSINESS BRANCH LIBRARY, INDIANAPOLIS

THROUGH the generosity of one of its citizens, the city of Indianapolis, in November, 1914, added to its municipal hospital facilities two new units, known as the "Burdsal Units" in honor of the donor, Alfred Burdsal. These two buildings, or rather, this one building of two wings, is equipped with every modern appliance, convenience, and comfort that science has invented or skill perfected for the care and cure of the sick.

It was not enough, however, that the buildings should be of practical design, solidly and correctly built, hygienically painted, well lighted (it is one of the best and earliest examples in this country of indirect lighting), that elevators should run, that furnishings should be of the best in quality and generous in quantity, and that equipment should be correct according to the latest designs.

All this one naturally expects to find in any big, modern hospital.

But here, in these units of the Indianapolis City Hospital, there is something more, something we have not been taught to look for in hospitals -that is, an elaborate scheme of mural decorations. All the wall spaces throughout the entire building, except those of the entrance corridors, are covered with paintings, painted directly on enormous canvases stretched upon the walls. As far as can be ascertained, no public hospital in the world—and only one private institution, a hospital in France-has anything like it, either in the character or magnitude of the work. And yet, as one makes the pilgrimage from floor to floor and from ward to ward, the discovery of such beauty as an integral part of a big hospital, instead of arousing surprise or even

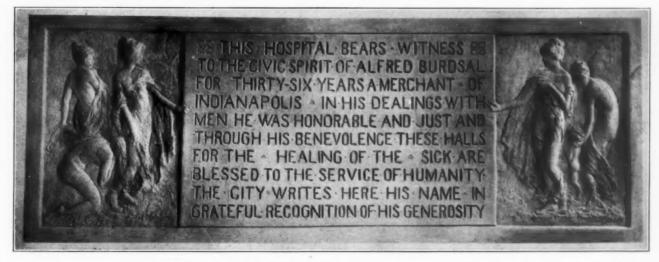


Fig. 1. The bronze tablet over the entrance to the Burdsal Units of the Indianapolis City Hospital. The modeling is by Helene L. Hibben, the inscription by Meredith Nicholson.



Fig. 2. The prince picks up the glass slipper. From the Cinderella series in the hall of the children's ward (Carl Graf).

wonder, seems as natural and as much a part of the place as the doctors and nurses who minister to the patients.

In the midst of pain and suffering and the sorrow that pain and suffering almost inevitably bring, the pain and suffering and sorrow can not be forgotten or long ignored. But, as the eye of the pilgrim rests on these paintings, which do not adorn but which *are* the walls of the anterooms, the private rooms into which, in passing, he steals

a glance, the long sun-swept wards, and even the big glassed-in porches, he feels inevitably the soothing touch of harmonious colors and generous outlines, and unconsciously he is filled with the hope that those lying there, in room after room—men, women, and little children; youth, the middle years, and old age; black and white—suffer less and find more surcease from their pain, are less discouraged over the vicissitudes that life has brought them, are less homesick in their temporary exile, and meet more bravely the longer journey that perhaps awaits them, by reason of the beauty that lies about them and above them, whenever they lift their eyes.

The best and most beautiful things in life are, we all know, the things we can not estimate or calculate or measure. If, in some mysterious way, we could but know the message these paintings with their gift of color, of story, of humanity, and of the great outdoors, have already brought, in the few years of their existence, to the shut-off and shut-in! Reaches of soft and tender colors, glimpses of peaceful waters, quiet trees, little children at play, fairy folk from the tales that have been loved for generations, babies asleep in their mothers' arms, groups of simple, happy men and women—surely all of these must have had their quiet, healing message.

Behind these beautiful canvases stretched on walls which, without them, would be just the customary painted walls of a hospital—clean and

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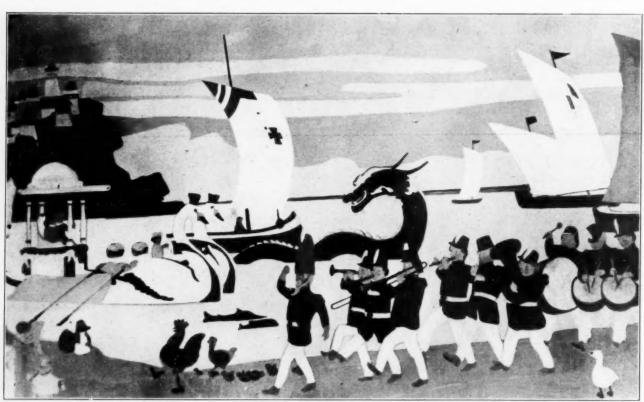


Fig. 2. Toy circus from one wall of the children's dining room (Otto Stark).

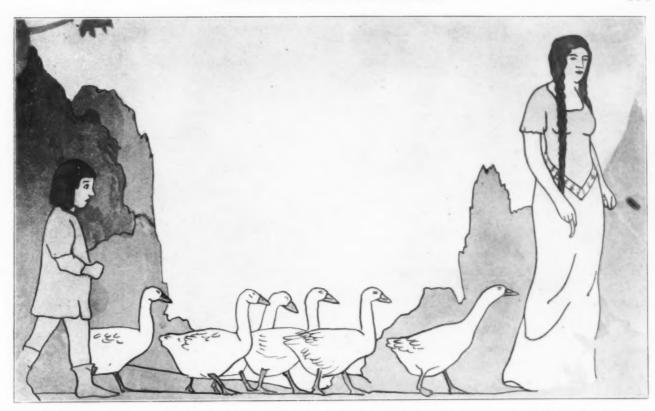


Fig. 4. The goose girl, beloved by many children, leads her geese across the wall of the children's sun parlor (Clifton Wheeler).

sanitary but cold and bare and lifeless—lies much that cannot be said. In their background there is, first of all, a little group of artists well-known in the art world as the "Hoosier group." To dwell at length on the history and characteristics of this group would be superfluous here. One of their own members, William Forsyth, says of them:

"A singleness of purpose has been the animating principle of this group of painters and their pupils. To paint their pictures here at home, to express themselves each in his own way and yet hold closely to that local truth characteristic of our particular spot of earth and interpret it in all its varying moods that are in its charmthis has held them faithful to their original intentions, has bound them together with a common purpose, and whatever success they have achieved is due to this. Even the appearance of their pictures testifies to the truth of this, for however much they may differ as to individual expression, treating the same subjects, influenced by the same moods of nature, trained in the same schools, associated together more or less for years, even as occasion demanded, using the same technique, there is a family likeness, indefinite perhaps, but yet a likeness, binding them together into perhaps as near a school of painting as has been developed in this country-certainly in the West."

Their work, their love for their native state, their affiliations, their summer colonies along the streams and among the hills of Indiana—all these things have endeared them to the inhabitants of the Hoosier commonwealth in much the same way that James Whitcomb Riley is enshrined in Hoosier hearts. Who could be more worthy than members of this group to share in and to direct

the younger artists, members of the Hoosier group by inheritance, in this labor of love, the adornment of a great public building in the capital city of their state?

Of the original "Hoosier group," T. C. Steele, William Forsyth, J. Otis Adams, and Otto Stark are represented on the walls of the hospital. William Forsyth had the direction of the whole plan of the decorations. While the work was in progress, during the years 1914 and 1915, some of the



Fig. 5. "Over the hills and far away," the prince rides with Cinderella.



Fig. 6. The children's ward is a picture gallery of portrait after portrait of happy, healthy children (Wayman Adams).

other names that follow were already beginning to be known outside of local artistic circles: Clifton Wheeler, Wayman Adams, William Scott, the negro artist, Carl Graf, Simon Baus, Martinus Anderson, Francis Brown, Walter Eisnogel, Dorothy Morlan, and Emma B. King. Many of these younger artists, who regarded participation in this big work as an opportunity, not as a task, are now well on their way to fame, but one wonders if anything in their future years will mean so much to them as did their share in this big scheme of mural decorations.

Side by side with these artists, without whom this work could never have been accomplished, stands another little group without whom the idea might never have been conceived or carried to execution-St. Margaret's Hospital Guild of St. Paul's Church of Indianapolis. This little band of young women with no fame outside their own chosen field of service is typical of many other such organizations all over this country working under the ideals of the modern social service movement. Organized in 1907 under the influence of the rector of the church, the Reverend Lewis Brown, who continues to retain an active interest in all their work, they decided to devote their energies to hospital work, particularly in the city hospital. They included in their idea of such service not only personal visits and ministrations among the inmates of the institution but also follow-up work in the homes after the patients have been dismissed. they who bring Christmas cheer and Easter flowers to the hospital, and a happy day in the wards is the June day when they fill the place with the flowers of early summer. A very interesting feature about the organization is that, while it is recognized as a part of the work of the church, it is non-sectarian, and anyone wishing to join in the work is eligible to membership, no matter what religious faith she professes.

It is not surprising to find that such an active, broad, and far-sighted body should respond quick-

ly to the suggestion that it aid in some way in the beautifying of the Burdsal Units of its hospital. From the first idea of a single painting by a local artist as a suitable and lasting gift from the society, their purpose gradually expanded into the enormous undertaking of a scheme of mural art for the whole building, on which not one but practically all the artists of Indianapolis were engaged. To this work St. Margaret's Guild contributed in money \$1,000, but who can estimate what they contributed in inspiration, support, and enthusiasm towards the fulfillment of this idea, which grows in beauty and in value as an artistic production year by year? All other expense beyond this gift of \$1,000-and this means practically all of the work of the artistswas donated, and donated with a generosity that adds to the beauty of the finished work.

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One other thing—and a truly remarkable thing in institutional history-must not be omitted in this brief attempt to tell how this one hospital came to be decorated as other hospitals are not. It happened, very fortunately, that, at the time the work was proposed, the physician who was the president of the Indianapolis city board of health was a man who combined professional qualities of a high order with a deep and sincere appreciation of beauty and rare artistic insight. This man was Dr. T. Victor Keene. No one but Dr. Keene himself, probably, has any knowledge of how much he has done to help and encourage the younger artists of Indianapolis. It is safe to say that without the official support that Dr. Keene was able to give, such a plan as this wonderful decorative scheme could not have been put into execution at all. It seems a happy combination, indeed, when those who conceive the original idea, those who execute it, and the civic authorities work together with such high aims and to such a successful result.

Whether to be accounted for by the existence of "The Hoosier Group," and its influence and guidance in carrying out the plan—whether by



Fig. 7. "Little Indian, Sioux or Crow, little frosty Eskimo-" children of all nations smile down on the children in the beds (Wayman Adams).

the thoughts of service that first inspired itwhether by some awakening of the spirit of local civic pride—whether by the indirect effect of Indiana suns and summers and the glories of Indiana autumns-the entire completed work gives forth a wonderfully harmonious impression of having been done by one master hand; such decided variations in style as do occur are easily traceable, in imagination, to the varying moods of the great over-artist, as, for example, in the psychopathic ward, where Mr. Steele's rich and colorful panels of the four seasons as they are known in Indiana are stretched, or where Wayman Adams, in place of using the big canvases employed in the other rooms, makes of the long children's ward a picture gallery of portrait after portrait of real, happy, healthy children. But, however it may have been brought about, one feels essentially this effect of harmony.

Viewing mural decorations in a great public hospital where the beds are occupied, where the

quiet orderly institutional life is going on in its clock-work regularity, where one's heart aches at what is seen and heard, where the visitors at the bedsides are often more tragic than the patients themselves—this is very different from strolling through an exhibit of paintings, catalogue in hand, pausing for a careful consideration of each picture that appeals. Indeed, it is almost impossible to imagine even the best of art critics being able to employ his critical faculties in the Burdsal Units of the Indianapolis City Hospital. In such surroundings, the paintings cannot be isolated and considered as pictures. They can only be felt as somehow a part—and a really necessary part—of the stream of life that is flowing steadily through the institution. The thought and skill, even the technique and the genius, that went into the making are forgotten and only the spirit and beauty of the pictures penetrate, a spirit and beauty which one feels must be reaching down to those in the white beds below.

### AMERICAN NURSES ARE COMBATING TYPHUS IN SERBIA

#### Red Cross Mission Finds Natives Using Paper for Surgical Dressings

All the hospitals of Herzegovina and Bosnia which are full of sick and wounded soldiers returned from Austria and many civilians suffering from typhus and many other diseases, are receiving aid from the American Red Cross, which has sent several doctors and nurses there and a large quantity of medicines and clothing. This assistance proved most timely, as a large number of patients were dying daily of septic wounds. All equipment is primitive in the extreme, and, in some cases, paper surgical dressings, unwashed and unsterilized, were employed.

The Red Cross Mission, which is in charge of Captain E. T. Thwaits of Milwaukee, Wis., has relief stations at Ragusa, Spalato, Sarajevo, Mastor, and other points. It is turning its attention to clothing the destitute, caring for the sick, and improving sanitary methods with a view to the prevention of typhus. It is cooperating with the United States Food Famine Commission which is distributing flour and fats to the poor.

#### THE GOLDEN RULE IN HOSPITALS

#### "The Patient Before Everything" Is the Slogan of Good Hospitals, Regardless of Other Considerations

A recent meeting of a hospital standardization conference in San Francisco laid down the Golden Rule as the golden rule of hospital administration.

"As a social institution," it was decided, according to an account in the San Francisco Examiner, "the hospital fills a unique place. The hospital is the host and home for sick guests. No matter how high its standards may be on paper, no matter how up-to-date its laboratories, surgeries, sanitary and sterilization systems, no matter how imposing and beautiful its architecture, no matter how perfect the scientific equipment of the physical plant may be, no matter how expert the methods of economy and management, or how well coordinated its departments have become through the administrative ability of the board and the executive ability of the superintendent, no matter how fine the technique or profound the learning of the staff may be, unless all of these activities are intended, directed, and dedicated to the benefit of the patient and the service of the community-they are mere tinkling cymbals."

#### NURSES' HOME AT BENNINGTON, VERMONT

## Livable, Homelike, and Restful is the Building Which Will House the Nurses of the Henry W. Putnam Memorial Hospital—Every Up-to-Date Convenience Makes It a Real Home

BY HARRY LESLIE WALKER, M.A.I.A., ARCHITECT

THE main building of the Henry W. Putnam Memorial Hospital in Bennington, Vt., the drawings and description of which were pub-

lished in the July, 1917, number of THE MOD-ERN HOSPITAL, has lately been completed and opened for service to the public.

A nurses' home has now been planned and will be erected in the near future on a site in the hospital grounds prevously reserved in

the general plan for this purpose. This building will be connected with the main hospital building by an underground passageway so that the nurses may pass from one to the other in inclement weather without going out of doors. This passageway will also be used for service pipes and wires between the two buildings.

The exterior architecture is of the same character as that of the main building, a simple modified Georgian style having been used. The exterior walls will be of rough brownish-red brick, the trim of white marble and white painted woodwork, and the roof of green Vermont slate.

The author of this building believes that the atmosphere which prevails in a building used for housing the nurses of a hospital should be essentially that of the home, and that this intimate and personable quality should be evident, not only in the planning arrangement, but especially so in all of the furnishings and decorations of the interior of the building. Generally speaking, the young women who follow the profession of nursing come from homes of positive refinement and culture, and during the hours when they are not on duty their surroundings should be as far removed as possible from anything that suggests or maintains the institutional character. One of the most important features in the arrangement of a properly planned nurses' home is that each nurse shall have a separate room, a room all her own, where she may exercise her individual taste in pictures and books, be free from interruptions during her studies, and in her leisure time enjoy the luxury of being alone.



Fig. 1. Nurses' home for the Henry W. Putnam Memorial Hospital in Bennington, Vermont.

This building will house twenty-three nurses, besides the superintendent of the hospital, who is provided with a private sitting room, bedroom,

and bath. In the first story of the building is a large living hall with a fireplace at each end of the room, a reception room, a tea kitchen, a large porch, and seven nurses' rooms with two baths. The tea kitchen opens from the living hall and is connected with the basement by a

small service stair. It will provide the nurses with a gas stove, refrigerator, sink and dish case, giving ample facilities for the preparation of luncheon or tea for their friends. The large living hall has a heavy wood-beamed ceiling and paneled walls; the wood is chestnut finished in a soft brown color with a waxed surface, and the room will be furnished with the utmost care and taste to make it livable, homelike, and restful. The prevailing colors will be brown and straw color, with some old blue and red in the rugs and over-draperies at the windows. The porch is enclosed in casement sash and screens, and will be furnished with comfortable wicker furniture, grey wool rugs, and straw-colored fadeless silk hangings at the windows. In the bedrooms throughout the building net curtains will be used at the windows, with cretonne or printed linen over-draperies, and the rugs and furniture will be selected with the principal idea always in mind that the result must be entirely restful and pleasing to the mind of a person of superior taste.

The second story is given up entirely to bedrooms, a corridor partition separating five rooms at one end from the remainder of the story; these rooms are for the use of those who must obtain uninterrupted sleep during the daylight hours. At the opposite end of the second story two rooms and a private bath are cut off from the main corridor, being provided for the isolation cases of contagious illness which may occur in the building. The second story porch is enclosed in sash and screens similar to the one in the first story, and as it enjoys an uninterrupted view

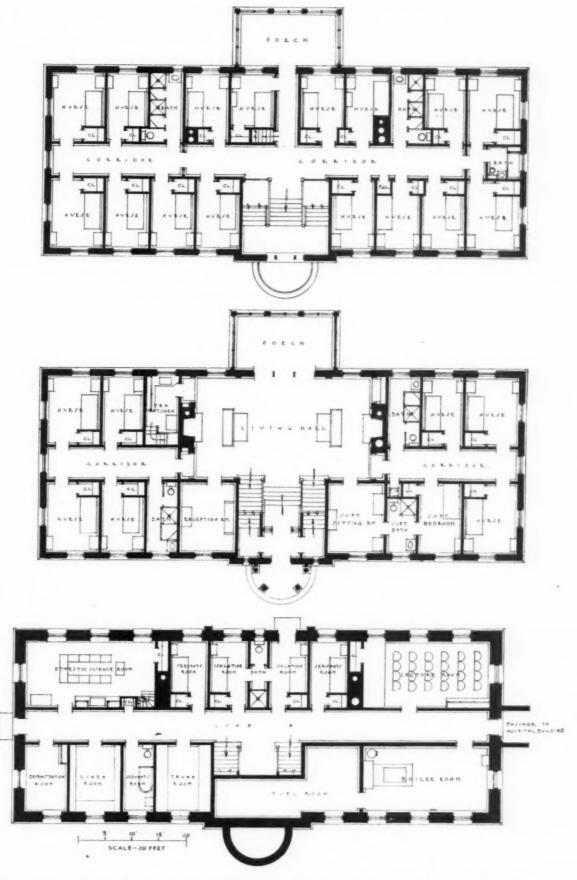


Fig. 2. These three plans show the second story, main floor and basement of the home. Note that the basement contains a lecture room, demonstration room, and domestic science room as well as servants' quarters, linen room, etc. The two fire-places in the living hall and the isolation rooms on the second floor for daytime sleeping and for sickness carry out the principles of comfort on which this home is built.

for many miles down the beautiful Vermont Valley, it offers an attractive and inspiring restingplace undisturbed by possible visitors.

In the basement are arranged the various necessary utility rooms, a lecture room, domestic science room, and demonstration room for the use of the school. Here are also the maids' rooms and bath, and two additional isolation rooms with bath, provided with a separate outside entrance which may be used in case of emergency.

The building will have all of the usual mechanical equipment of the best and latest type, such as vapor heating, electric lighting, and porcelain plumbing fixtures, making of it a home which is livable and pleasant as well as practical. There are no bath tubs provided for the use of the nurses excepting the one in the isolation bathroom at the end of the second-story corridor. The other bathrooms are furnished with marble partitioned showers, with small dressing rooms attached.

#### TWO FACTORS IN HOSPITAL STANDARDIZATION\*

## Vision and Organization—Need for Men to See and Men to Keep Records—Hospital Standardization Cannot Follow Lines of Medical Reform— Publicity Not Desirable

BY A. R. WARNER, M.D., SUPERINTENDENT LAKESIDE HOSPITAL, CLEVELAND

7 HAT is a hospital and what is it for anyway? There are afflictions of human life which are preventable and infirmities which may be delayed, but the need for medical care to the human family is unquestionable forever. Hospitals are institutions developed by society to meet this situation, to prevent or contribute to the prevention of the preventable, and to the delay of the delayable, and to make the inevitable as comfortable as possible. The fundamental aim of a hospital is, therefore, service to society. Hospitals may benefit and develop special groups of men and women as physicians, nurses, etc., but the fundamental aim will ever be service to society, and all effort must justify itself in this light. Personal benefit to the individuals or groups is not to be considered, except as contribtuory.

One motive for the desire to standardize hospitals is an aim to reduce, to make logical and clear, the present extreme variations in the types of existing institutions and their work; another is a desire to improve the hospitals radically as social institutions; and a third quite general motive is to bring about improvements in the particular departments in which special groups are interested. But we are here today because everyone wants something done about it. All have in mind the example of the work of Abraham Flexner of the Rockefeller Institute and the effect of this work upon medical colleges. A corresponding regeneration of hospitals is dreamed.

Hospital standardization in this sense and degree seems to me to be made up of two distinct parts. The first is theoretical, individual, inspired. Someone must see clearly and be able to make others see the details of the ideal hospital

of today and tomorrow, rendering ideal service to society. This service will perpetuate itself and carry on the work outside as well as inside its walls, by training men and women in all the various kinds of work necessary to make the institution ideal and to do effective work in all lines which can contribute to the fundamental purpose of the institution. These details must be seen clearly and then described clearly; they must be reduced to rules and the rules backed by commonsense reasons which are so convincing as to command respect and general allegiance. This is the difficult part of hospital standardization. When we know what a hospital should be, it will be a simple matter to determine if a hospital is that or not, and how much it lacks.

The second part of hospital standardization is the mechanical organization. Someone must determine how nearly the institutions approach these ideal standards, and somewhere this information must be kept available to all those who would know it. This part of hospital standardization can and should be done by the American Hospital Association. This association can develop the necessary organization to measure the various institutions of the country by the rules determined. It can tabulate this information and classify the institutions. It can keep this information on file as well as any organization, and will have a more active incentive to keep it up to date. The American Hospital Association is this year in a period of transition from an association of voluntary members to an association of institutions themselves as primary members, although personal membership is still permitted. This makes it possible to accomplish much which has heretofore been impossible. This association, more than any other, will be interested in the de-

<sup>\*</sup>Read before the conference on hospital standardization at the headquarters of the American Medical Association, Chicago, April 21, 1919.

velopment of hospitals to meet the higher standards, and, for obvious reasons, will have the best opportunities for direct appeals to trustees. There are already before the association plans for the establishment of bureaus to render free service to hospitals in matters of reorganization and improvement. There seems to be nothing in the organization and mechanical part which the American Hospital Association cannot do better and easier than any other association now in existence

But this part is the easy part. The big problem is in the setting of the standards. It will require all the wisdom which can be secured to study, to comprehend, to analyze modern human physical life, and to advise and determine the type of institution which can render maximum serv-In this part of the work every viewpoint must be considered, every type of service weighed and evaluated, not only for the present, but for the future. This seems work for more than one The problem is exceedingly complicated in comparison to that of medical education. We cannot hope to find a man who can do for hospitals what Abraham Flexner did for medical colleges. The methods used in the case of medical colleges are not so serviceable in the case of hospitals. It would not suffice simply to study hospitals and make public their shortcomings. There is interest in hospitals from so many active viewpoints that the defects of the institutions are now fairly well known to those directly interested. The public does not know them, and it does not seem wise to attempt or permit the general education of the public in these matters. The results would be too serious. It mattered comparatively little to individuals if the medical colleges did not give sufficient or effective education. Everyone believed that their trusted family doctor had made up these defects in his years of practice, and the matter was to them merely an academic one. This will not be the case, however, if the defects of hospitals are so advertised. The interpretation throughout the country will be that their family and friends who are at the time in hospital care are receiving inadequate or incompetent care. It is difficult to conceive of the worry and heartaches such publicity would bring, especially to the poor to whom hospital service in case of illness is a necessity. Such publicity would also tend to decrease general contributions to hospitals. Hospital standardization cannot proceed along lines analagous to those used by Mr. Flexner.

The object must be to reach and educate hospital trustees. Every trustee learning that his institution is classified D5 instead of A1 will ask why that institution, in which he is so interested

and to which he has given so much, is not an A1 hospital. The rules of standardization should be able to tell him the various points which his institution lacks. The result will be a spontaneous determination to get nearer the top by correcting The American Hospital Association, defects. through whom he should learn of the defects. should and will have service bureaus in charge of experts to plan with him the required changes. A limited public will get a certain amount of judicious education in the raising of necessary funds, but the heartaches will be eliminated. To me, rapid progress in general betterment of every hospital in the country seems inevitable, as soon as hospital standards are set and the institutions classified in accordance with them.

The setting of the standards is, however, the important and difficult task. In determining these standards every possible viewpoint should be carefully considered. There seems nothing to propose but a commission or congress made up of representatives who can present the clearest and most accurate interpretation of every viewpoint and which has the interest and determination to carry this project through. This commission may well represent wider fields of interests than are represented by those present and, in addition to those representing every type of work which now is or should be carried on in hospitals which would include the trustees and other forms of management or control, various types of outside viewpoints should be selected for representa-

#### The Alimentation of the Sick

A scientific commission appointed to examine the question of the alimentation of the sick made the following report, according to an account in the *Policlinico* of Rome.

Milk and milk products form the basis of alimentation for the greater number of the sick and all hospitals should be provided with a sufficient quantity. Condensed milk forms a good substitute. The production of goat's and ass's milk should be encouraged. After milk, eggs are the most valuable food for sick people, considering their nutritive value and digestibility. The question of meat is a complex one, but it is certain that in cachectic and debilitated conditions meat is an indispensable food. Meat broth is not so valuable as is generally supposed. Pastry and rice, as well as leguminous foods, are excellent alimentary articles for the sick and convalescents. Sugar is a most valuable and necessary food material, and in case of great scarcity all sugar should be reserved for the hospitals and the sick people generally. Maltose and saccharose may be used as substitutes. Grape sugar in the form of sterilized grape juice, condensed grape juice, and grape honey is a food material of great importance, not only for its high nutritive quality but also for its exquisite taste. This aliment may, to a certain extent, replace milk. In the distribution of food in all communities, preference should always be given to the hospitals as regards quantity as well as quality.

#### MUSIC TAKES FIRST PLACE IN RECONSTRUCTION WORK

#### Games and Sports Are Good but Music is Best for Cheering the Wounded and Soothing Shell-Shocked Minds

BY J. W. HARTING, AMERICAN RED CROSS, NEW YORK CITY

FEELING that our returned soldiers are as much entitled to the best guidance in their leisure during convalescence as they are to the most skilled medical attention, the Red Cross has organized a recreation program under the direction of experts. Equipment is being furnished to the hospitals and trained personnel appointed for leadership. Dr. Elbert K. Fretwell, head of the department of recreational leadership, Teachers' College, Columbia University, is in charge of the work, which is under the joint direction of the Surgeon-General's office and the bureau of camp service, department of military relief of the American Red Cross.

The universal love of music affords endless possibilities in the way of objective recreational work. Provided it be encouraged under proper guidance, it may be a valuable factor in reconstruction. It is best not to allow disabled men to indulge in it merely as a recreation, but to divert their interest toward an objective, for too much recreation which is simply of the time-killing variety is a dangerous thing, even for our convalescing heroes.

In the last decade or two educators have stressed the necessity for using leisure time to the best advantage. They are not trying to disprove the old saw to the effect that all work and no play makes Jack a dull boy. They merely want to help Jack to get greater enjoyment out of his

Fig. 1. "There are smiles that make me happy-"

play and to store up unconsciously treasure for himself in the way of character, principles, and proper habits of mind.

Sports of all kinds constitute the finest recreation in the world. They are enjoyable and yet at the same time inculcate sound principles for



Fig. 2. Doughboys and partners taken by surprise. The two onearmed men in the foreground are among the best and merriest of the dancers.

which a man is better all his life. A fair sportsman is likely to be an honest business man. The man who is generous to his opponent in the field is not the one we expect to resort to cut-throat competition in the commercial world. A good loser is respected in any game in life.

Music, in the same way, has a distinct place as an educational factor in any organized recreational program, for frequently it is the spark which kindles those higher impulses in men which, sympathetically fostered, develop into the big, noble qualities. No matter what the degree of the man's incapacity, he can enjoy music and derive benefit from it. In cases of nervous disorders brought about through horrors witnessed or from shell shock, it is frequently the one medium through which he can be reached.

An instance of this sort is illustrated by an excerpt from the letter of a Red Cross field director to the bureau of musical activities:

Not long ago a vocalist and a reader were sent to us for an entertainment. They were booked for the Red Cross house in the evening and for ward work in the afternoon. I went with them to the insane ward. One patient was counting over his fingers in an intensive sort of way, talking incoherently, and all the while neither the doctor in charge nor I could influence him to stop while the reader was telling her stories. I suggested that the vocalist be called upon. She responded with a sweet melodious song and the babbling stopped almost instantly. At first there was nothing but silence; then I seemed to see an interest creep into his being. A healing influence had reached him by virtue of the music.

Such invisible wounds are sometimes harder to heal than the shattered limb. They have to be reached by subtle means, among which there is nothing more potent than music. It is like the fairy fingers which touch not only the ears but the eyes, giving back to the stunned mind of the man a glimpse of the world that was—and still remains for him. In one instance at least it was the fairy hand which clasped a wasted, material one and slowly, ever so gently, drew its owner out of the valley of the shadow into God's own sunshine again.

The boy from the mountains was slowly dying. One day a Red Cross field worker brought a trio of mountain boys into his ward with a banjo and a guitar to entertain the patients. The lilt of the merry folk song seemed to fan the flickering life spark that had gone beyond the reach of material aids.

The banjo players came again. The boy's interest grew stronger. Finally he confided to the nurse that he "useter pick one of them" and that he would like to try his hand. It was the first desire he had expressed for anything. The banjo

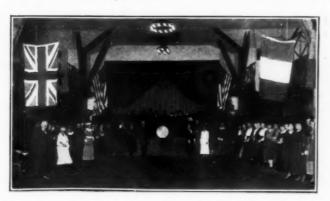


Fig. 3. The ballroom of a convalescent hospital. Flags of all the nations and a real jazz band make it a festive affair.

was provided by the Red Cross and the boy gradually got a new grip upon himself.

The psychological value of music is incalculable and its use in creating an objective through recreation is hardly of less worth. Many men in the hospitals show a considerable degree of talent. There are some who have had elementary instruction, but have never, since their entrance into the business world, had a chance for further study. If, during their convalescence, they can be given the opportunity to increase that knowledge and develop what talent they may have, the new objective is a veritable life saver to them. The danger of aimless leisure lies in the habit of mind it engenders.

If the men are allowed to organize their own orchestras and produce no music other than that of the "jazz" variety, they will derive little actual



Fig. 4. Who's who in the world of music.

benefit other than the passing amusement. With an organized program, however, such as the Red Cross has planned, education and entertainment are combined. The Red Cross is providing instruments of all descriptions and is enlisting the interest of professional musicians who will volunteer their services for instruction.

The recreation program includes provision for games and sports of all sorts in addition to entertainments and concerts by professionals. But throughout the entire work the foremost thought in mind is the improvement of the spirits and morale of the convalescing soldier.

The description of the recreation hall in any army hospital suggests a mountain hotel interior on a rainy afternoon. The background is much the same, with its huge open fireplace, crackling logs, long tables littered with magazines and books, other smaller tables over which faithful correspondents bend, couples and quartets absorbed in a game of chess or pinochle, the group singing around the piano—even the rain may be beating against the casement windows; the assemblage, however, is of a different kind and different sex from that which gathered in the prosaic ante-bellum stronghold.

The rocking and "knocking" brigade is nowhere in evidence. The easy chairs are filled with khaki in varying degrees of deshabille. From the group at the piano comes a throaty, masculine effort at harmony. Over all, giving significance to the scene, hangs "Old Glory" flanked by the flags of the allies interspersed with the banners of the Red Cross.

It was the stormiest afternoon of this spring when one of the hospitals was visited. But did our boys from overseas let their moods take on the complexion of the weather? Just because the press agent of the Hindenburg "show" aired it about that the line was "impregnable," did they right-about-face? If the weather man peeped in that afternoon he would be a firm believer in the

old rhyme, "Laugh and the world laughs with you; weep and you weep alone." Certainly nobody at that hospital lost any of the joy of life because of a grouch.

It is a way our returned fighters have of scorning little superficialities like the weather, and they

take the same attitude toward crutches, slings, bandages of all descriptions, and other little spring-1919 novelties in vogue this season at base hospitals. While the boys can extort a little music from anything that has keys or strings, records or rolls, they are going to be happy.

#### THE CHILDREN'S HEART HOSPITAL AT BROOKLINE, MASSACHUSETTS

#### Fills a Need Not Met by Ordinary Convalescent Homes—Quiet and Care Provided for Children Recovering from Acute Heart Disease

BY JOHN LOVETT MORSE, M.D., CHIEF OF STAFF, CHILDREN'S HEART HOSPITAL, BROOKLINE

THERE has been for a long time a very urgent need for places where children of the poorer classes convalescing from acute heart disease



Fig. 1. The Children's Heart Hospital is a large private house, remodeled to meet the needs of a hospital. Spacious grounds provide for an abundance of light and air.

could receive proper care. These children require

rest in bed for several months after the most acute stage of the disease has passed and supervision for many months longer after they are up. The general hospitals cannot give this prolonged care, because their beds are required for children with acute diseases. The ordinary convalescent home is not suitable for these patients, because the children convalescing from other acute diseases are up and about and disturb these convalescents, who should be kept quiet. They cannot get the proper attention in their homes, partly because of the other children in the family and the excitement around them, partly because of the inability of their parents to understand what rest really means or to appreciate its impor-

The Children's Heart Hospital was established in 1913 to meet the needs of these children and to give them the rest and attention which they so urgently require. It was founded by Mrs. Carl P. Dennett, who has entirely supported it from the beginning.

tance, and partly because of the inability of the average parents in this class properly to control

their children.

The present house at 137 Englewood Avenue, Brookline, Mass., was acquired in 1915. house is beautifully situated on a hill in a quiet section of the town. It was formerly a large private house, but it has been remodeled to meet the needs of the hospital. It is surrounded by spacious grounds, beautifully laid out. It is easy, therefore, to give the children an abundance of fresh air and sunlight and to keep them comfortable both summer and winter. There are two wards of ten beds each. A large piazza is connected with each ward, so that when the weather permits the children can be taken out of doors, and a large glass room on the lower floor provides a place where the children can be taken in stormy or extremely cold weather. There is, in addition, a small isolation ward, and a separate room for any child who is acutely ill. A small laboratory has been installed, which is sufficient to care for all ordinary clinical work; there is, also, a dental chair with a complete dental outfit.

No children are admitted except those convalescing from acute endocarditis. It is not the intention to take children with acute endocarditis



Fig. 2. In the sun room where the children who are able to be around find quiet entertainment which keeps them happy and contented.



Fig. 3. The piazza of an upper ward. Here the children are kept in absolute quiet until they are able to be up. The out-doors surroundings help to keep them from restlessness.

until they have passed the febrile stage. No cases suffering from chronic valvular disease of the heart, whether compensated or not, are admitted. It is required, as far as is possible, that the children have their teeth put in good condition and diseased tonsils and adenoids removed before they are admitted to the hospital. If this has not been done, however, the teeth are put in order by the dentist of the hospital and the tonsils and adenoids are removed at the Forsyth Dental Infirmary by the laryngologist, who is connected with both institutions. In this way the foci of infection are, in most instances, eliminated.

The patients are kept flat in bed until they are able to begin to get up. They are then gradually moved along until they are able to be up and about without injury to their hearts. They are then returned for further care to the institutions or physicians from whom they came.

The staff consists of a matron and two nurses. A visit is made at least once a week by a physician. He makes more frequent visits if there is any special child demanding attention. An undergraduate medical student makes more frequent visits, does the laboratory work, and keeps the records

It has not been found difficult to keep the children happy and amused, neither has it been found difficult to keep them quiet. The newcomers find that the other children are quiet and quickly accept the conditions. Simple amusements are provided and, as the children improve, the amount of exercise they are allowed to take is increased. The many hours which they spend out of doors also keep them happy and contented. Thus far no attempt has been made to provide instruction, but it is hoped that something of this sort may be arranged for in the future.

The results thus far obtained have been most encouraging. A certain number of the children have been discharged well, while the damage to the heart has been so limited in the vast majority of the others that they have been discharged with hearts but little impaired functionally and strong enough to meet the ordinary demands of life. The number of patients thus far treated has, of course, been rather limited, because the children spend a number of months, and sometimes many months, in the hospital. This experiment, if it can be called an experiment when the results could have been so certainly anticipated, has been most successful. It is hoped that it can enlarge its work in the future and that other similar institutions for these unfortunate children will be established.

#### Keeping Up With the Doughboy

Mobile hospitals, portable kitchens, rolling canteens—it sometimes taxed the ingenuity of the agencies of relief to keep up with our troops, but the army can not get in so tight a place that the Red Cross can not follow it.

One of the most interesting phases of their work is the mobile hospital, which is taken from one battlefield to another. Auto trucks carry complete surgical equipment to



A hot drink on a cold day or a cold drink on a hot day is one of the little things that help to make life more like home.

any part of the front, and their work is supplemented by portable kitchens, disinfecting plants, and dental ambulances. The dental ambulances have all the latest instruments that may be found in an American dental office.

"Most interesting," in this case, however, is probably spoken from the point of view of the wounded soldier or of those who serve him. To the normal, healthy doughboy the canteens, which spring up like mushrooms wherever they are needed, are probably one of the most interesting phases of the war.

#### Good Use for a Kitchen Cabinet

A white enamel kitchen cabinet makes a good substitute for a case for medicines and dressings in a hospital in which the more expensive and up-to-date cabinet could not be afforded.

#### DEVELOPMENT OF THE HOSPITAL WARD UNIT OF THE UNITED STATES ARMY

#### Changes Which Took Place After We Entered the War—Increasing Attention to Light and Air-Adequate Provisions for the Care of Contagious Disease

BY EDWARD F. STEVENS, ARCHITECT, BOSTON

which existed had not received the careful study

WHEN the United States entered the world cantonments and the sixteen National Guard war in 1917, there existed few, if any, large camps, hospitals for the accommodation of aparmy hospital units in this country, and the few proximately one thousand beds each were designed by the army officers in charge of this work

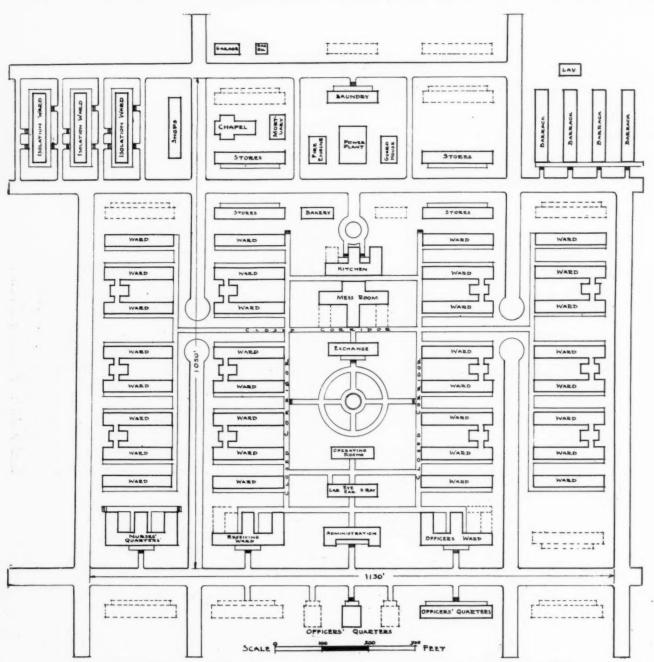
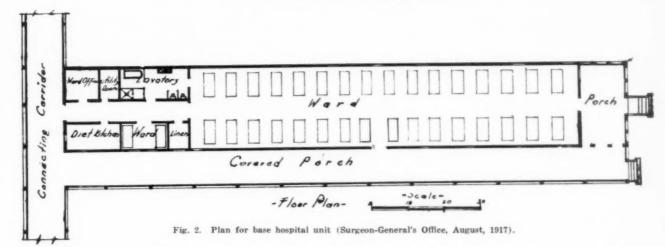


Fig. 1. Plan for base and cantonment hospital, as first presented by the Surgeon-General's Office (May, 1917).

were hardly comparable with the army hospitals of other nations.

When the government established the sixteen later by the addition of convalescent units.

and planning accorded the civilian hospitals and at the Surgeon-General's office. These groups originally comprised from sixty to seventy buildings, but this number was greatly augmented



In this discussion, the general grouping and the portion occupied by the sick soldiers—the ward unit—will be considered; the mechanical plant, the operating unit, and the housing for staff and orderlies will not be taken up.

It should be remembered that at the time the United States entered the war the French had more than six hundred thousand and the British nearly one million beds in army hospitals, from which it was possible to find precedents as to the

plan best adapted to the needs of the United States. In the French army hospitals, in particular, there had been developed an economical and practical solution of the ward unit, at least.

These United States hospital buildings just referred to, like the cantonment barracks, were built of wood, with wooden foundations, and in a temporary manner. With but few exceptions the buildings were only one story in height and in almost every case they were connected with

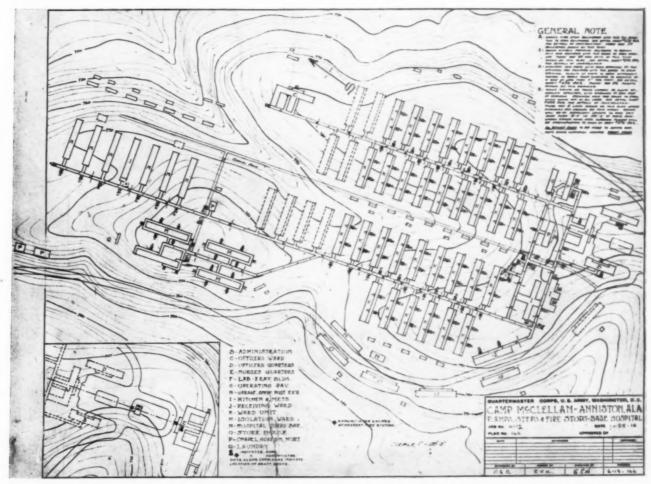


Fig. 3. Camp McClellan, Anniston, Ga., a camp which illustrates an improvement over the earlier camps in which it was considered necessary for the hospital to "face the cantonment," even at the expense of light and air.

each other and with the other units by covered corridors.

The ward unit plans, as first presented by the Surgeon-General's office, contemplated the group-

feet, or 12.3 per cent of the wall surface. A 12foot balcony extended along one side, a feature which was a decided advantage in the southern climate and for treating certain dis-

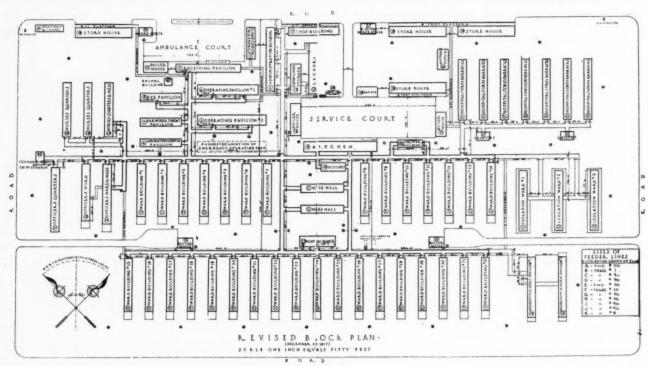


Fig. 4. General plan for overseas unit adopted under the direction of Chief of Engineers, U. S. A. (December 20, 1919). The ground covered by this unit is 1550 feet by 750.

ing of the ward buildings in pairs, with the toilets placed between the wards at one end and joined with connecting corridors between the buildings at the other end, as shown in Figure 1. Before the plans were issued for erection, it was realized that enclosing the space between the wards not only cut out light and air, but afforded an extra fire menace and inaccessible pocket, and this plan was abandoned. In some of the wards, however, this form of between-ward toilet was used at the corridor end, but for the greater part the single ward unit was adopted (Fig. 2).

eases, but which greatly reduced the air and sunlight for the ward itself.

As a very large proportion of army hospital patients are ambulatory, it was found to be economy to build additional two-story wards for these men, as well as for convalescents. Each of these units consisted of four wards or dormitories, two day rooms, toilets, and balconies, but contained no provision for the service of food.

While the orienting of the wards on the site is almost as important as the plan, the general thought of the officer in charge of the planning

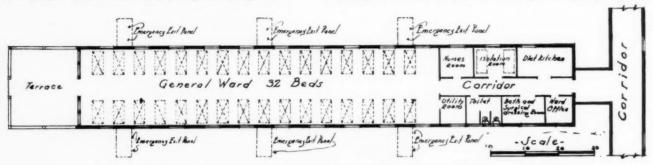


Fig. 5. Ward unit of the overseas hospital, fabricated in the United States and shipped, ready to erect.

one ward and a quiet room for two patients, with diet kitchen, office, toilet, linen room, etc. Each ward had eighteen windows, a total of 278 square

This plan provided for thirty-two patients in of the hospitals was that "the hospital must face the cantonment," and the question of sunlight and air was largely disregarded. One noteworthy example, however, was at Camp McClellan, An-

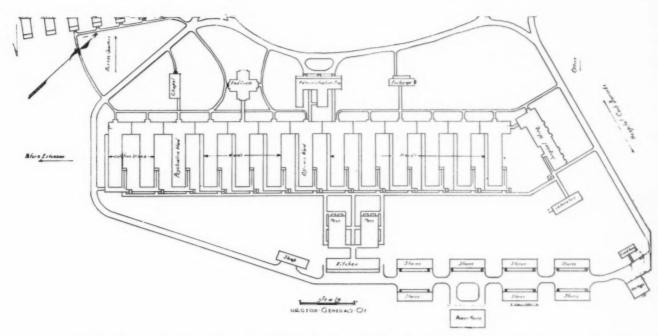


Fig. 6. General plan, base hospital, Camp Knox, Ky., illustrating the new head-house type of hospital, developed to provide a more concentrated plan and one easier of administration (Surgeon-General's Office, October 10, 1918).

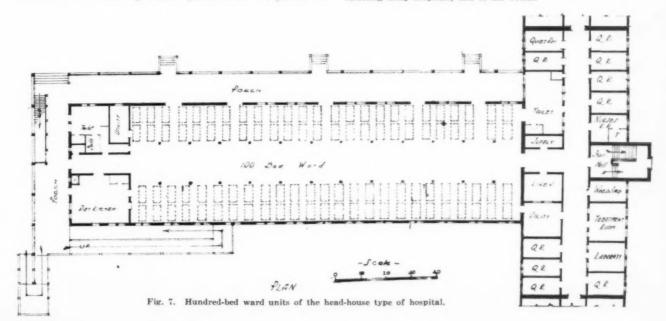
niston, Ala., where the grouping and orientation were vastly improved. (See Figure 3) True it was with the general plan (Fig. 1) that in whichever direction the hospital faced, 50 per cent of the ward would receive the maximum amount of sunlight and air, at the expense of the other 50 per cent. Of course, it was necessary in the thirty to forty groups to erect the buildings on the sites selected, and it is to be surmised that few "faced the cantonments."

The planning of our overseas hospital units then followed, and these plans were developed under the direction of the Chief of Engineers, U. S. A. A new general plan was adopted, so arranged that the maximum amount of sunlight and air would be obtained for all wards or patients' buildings (Fig. 4) and that the administrative portion would be centralized.<sup>1</sup>

As the overseas hospitals were designed to be fabricated at a distance and shipped ready to erect, the buildings were confined to certain standard widths. The ward unit, however (Fig. 5), was designed to obtain the maximum amount of light and air for the patient.

A standard of thirty-two beds was provided, and the general utilities were made similar to the

The planning of these units was placed in the hands of Mr. Charles Butler, who had served under the French Government in constructing army hospitals, and of the writer.



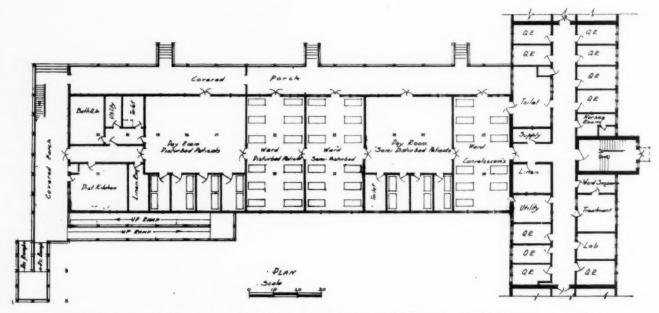


Fig. 8. Psychiatric ward unit, capable of conversion into general ward (Surgeon-General's Office, August 21, 1919).

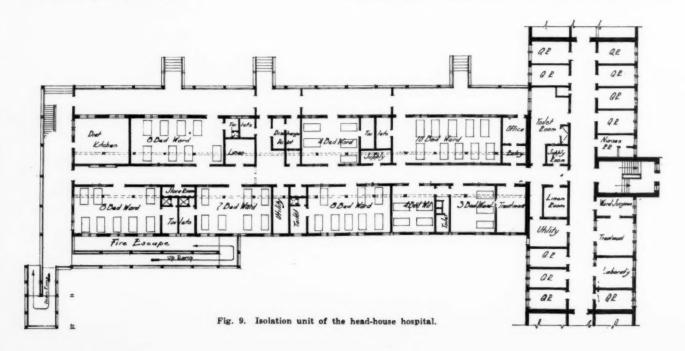
plans made by the Surgeon-General's office, but the method of lighting and ventilating was improved by increased window sizes, so that 24.5 per cent of the wall surface was glass and capable of being opened 100 per cent of the glass area. The airing balcony was placed at the south end, leaving the sides free for light and air. These wards were to run approximately north-south, with the airing balcony at the south, leaving a space between buildings of 33 feet.

Removable panels forming ramps gave extra provision for emergency exits, by which the patients could be speedily removed.

Double floors, walls, and roofs insured protection from heat and cold.

While many slight changes were made in the Surgeon-General's ward unit running from K-1 to K-30, the same general scheme prevailed for the army hospitals in this country, until the so-called "head-house" type of hospital was developed. This was brought about by the desire for a more concentrated plan, one covering less area and consequently easier of administration, and allowing for greatly increased capacity.

This general plan (Fig. 6) called for buildings practically all to be two stories in height, the ward buildings being pavilions joined to the headhouse. Each ward unit consisted of two 100-bed wards, twenty single or quiet rooms, toilets, diet kitchens, etc. (Fig. 7). The wards are 11 feet



in the clear height, 48 feet wide, with beds arranged in four files. There are twenty-six double windows on each side, taking up 23 per cent of wall area. The heads of the windows were placed 2 feet 5 inches from the ceiling to the sash, and

The orientation generally is good, as all wards run north-south, but the precedent here established by the government of placing one hundred sick soldiers in one room or ward, with but 3 feet between the beds and without subdivisions,

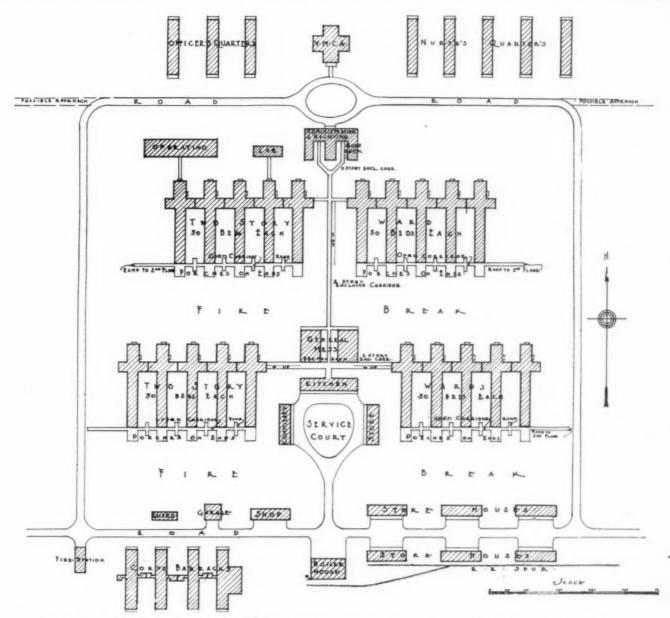


Fig. 10. General block plan for a 2,000-bed hospital, proposed by comm ittee of three on army hospital plans (November, 1918).

the cubical contents were minimized by using a flat instead of a sloped ceiling for the second story. The light is reduced by a wide side airing balcony and by ramps on the opposite side from the balconies. A gallery connecting the pavilions on the south affords a means of escape in case of fire and a means for the ambulatory patients to reach mess in pleasant weather. The private or quiet rooms are placed on a corridor which is the main artery of communications and for supplies and which in some cases is over 1,000 feet long, lighted by direct light only at the ends.

is one which civilian hospitals would not dare to follow.

The psychiatric ward unit, planned to occupy the same area and to be capable of conversion into a general ward, is shown here (Fig. 8). While the subdivisions would seem well proportioned, the difficulty of administration is apparent from the fact that in passing from the main corridor to the south exit, one must pass through no less than eight doors, which must be unlocked and locked after every passage. This could have been avoided by a continuous corridor.

In the isolation unit of the type (Fig. 9), there would seem to be an insufficient number of isolation rooms, and the main toilet, having little use in this unit, would seem unnecessarily large. The

of the blocking up of light and air by the front row and the impracticability of moving the beds into the sun. In the shack plan, however, this objection does not occur, and the patient is pro-

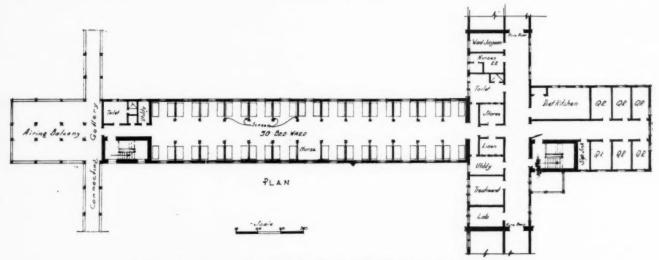
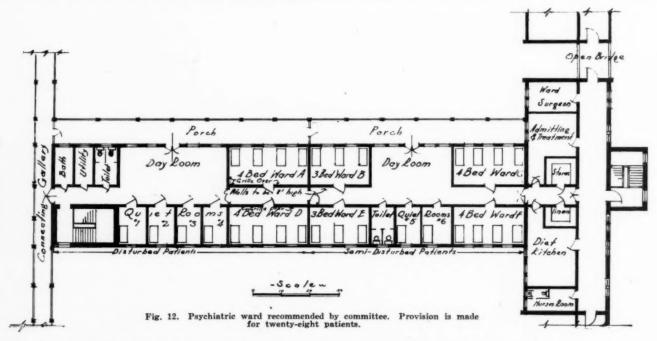


Fig. 11. The new general plan provided for wards of fifty beds instead of one hundred.

wide airing balcony, too, could safely be used only by patients suffering from the same disease.

Numerous types of wards for the care of tuberculosis were developed, but only two are here described. One of these consisted of a double row of beds, facing an open south front; another, built on the so-called "King plan," was known as the "shack" arrangement. While in the double plan the patient may be protected from his neighbor tected from his neighbor by the screen and may have his bed moved into the sun at will. The day room and dressing-room are common to the two wards and are essential to the comfort and wellbeing of the patients.

After this later head-house type of ward buildings was well under way and materials ordered, the Assistant Secretary of War in October appointed a committee of three hospital archi-



one patient from being placed directly in front of another, the back row, nevertheless, would receive the minimum benefit of the "cure" because

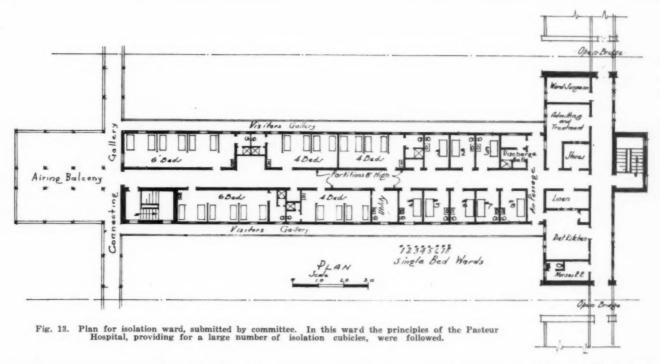
by the screens which are "staggered" to prevent tects to review and offer constructive criticism of the existing and proposed hospital buildings.

<sup>2.</sup> Consisting of Mr. Charles Butler, Mr. L. M. Franklin (of York & Sawyer), and the writer.

After a careful study of all the plans for hospitals so far developed in the Surgeon-General's office and after a further study of existing buildings erected, in use, and in course of erection, this committee realized that to provide for large units of from one to two thousand patients, some form of two-story buildings must be used in order to economize both in ground area and in cost of administration and at the same time to afford sufficient protection to the patient and prevent the spread of contagion. The general plan (Fig. 10) shows how the ward units attached to the general

Fireproof stairs at either end of the unit and the ramp at either end of the second-story gallery afford ample fire exits.

In the psychiatric ward recommended by the committee (Fig. 12), provision was made for subdivisions similar to those adopted in the wards designed by the Surgeon-General's office, but with ready access to one section from another, and with the ward divided for disturbed and semi-disturbed patients, with a separate day room for each. In the disturbed portion, four quiet rooms for the violent patients were provided, together



corridors are grouped around the central buildings.

The new ward unit (Fig. 11) was designed, providing for fifty beds in each ward instead of one hundred. The utilities were placed on the south of the through corridor, which is lighted abundantly on the north. The ward is 28 feet wide, with one file of beds on either side of the center. The side is 27.6 per cent glass, which is capable of opening 100 per cent for air; the windows, being carried to the ceiling, afford the maximum ventilation. A low screen is placed between each two beds, protecting one patient from another. No sunlight is cut off on east or west, but an ample balcony is provided on the south. A gallery connecting wards at the south end and ramps at either end of the group affords an exit in case of fire and a quick way to reach the mess hall. The quiet rooms are in an extension at the north of the connecting corridor, with east and west exposure. The corridor, amply lighted on the north, connects with all departments.

with two four-bed wards; in the semi-disturbed section, two four-bed and two three-bed wards and two quiet rooms were planned.

The unit is so arranged that in passing from the diet kitchen to the extreme south end of the building, it is necessary to pass through but two doors, each ward being separated from the main corridor. Ventilation is secured by making all the walls of the interior partitions but eight feet high; in the disturbed portion, the walls are continued by substantial grilles. Doors into the admitting and treatment department, the diet kitchen, the nurses' room, and the ward surgeon's room open from the main corridor.

Provision is made for limited continuous bath, as from observation and consultation with the specialists it was found that one bath for each unit would be sufficient in the army hospitals.

In the isolation plans submitted by the committee (Fig. 13), the principles of the Pasteur Hospital were recognized; a large number of isolation cubicles were constructed, each cubicle pro-

vided with sink and watercloset. In four- and sixbed wards, each two beds are separated from the others by a low screen to minimize the possibility of cross-infection.

Narrow open galleries surrounding the building make observation and communication with patients possible from out-of-doors, making practicable the visiting of friends with the minimum danger of contagion. Fireproof stairways connect the airing balconies, and the communication balconies are the same as in the general ward plans.

Another type of overseas ward unit built at Sarisbury, England, from the plans of Arnold Thornley, F.R.I.B.A., for the American Red Cross and for our sick soldiers, presents some new thoughts in the bed arrangement, at least.

This hospital, when completed, will accommodate two thousand beds. Each unit consists of four wards of seventy-eight beds each and a common bath and toilet "block." These toilet and bath blocks, located equidistant from the wards, will be an economy in construction and cubing if they prove to give enough capacity for the needs. The wards are 40 feet wide, with high

walls and a ceiling reaching to the roof line, which is crowned by a monitor.

The bed arrangement is unique. While there are four rows of beds, the two inner rows are kept away from each other by a 5-foot permanent screen running down the center of the ward, really dividing the ward into two thirty-nine-bed units; for supervision, however, the attendant standing at the end of the ward, obtains a complete view of the entire ward.

As these wards are but one-story high with numerous exits, the lack of airing balconies may not be noticed. The window spacing (every 6 feet with 3-foot windows) should give plenty of light if carried nearer the ceiling.

The connecting corridors are ten feet wide.

While the "double-ended" ward can obtain only the average amount of sun, there will be a maximum amount of sun on one side if it is oriented east and west. The lack of sufficient utilities and the absence of quiet rooms seem to be the greatest defect in this plan.

These units are built of "cinder brick," a permanent form of construction, and present an attractive appearance.

#### A HINGED WINDOW FOR THE USE OF HOSPITALS

# Designed for War Conditions, It Is Equally Effective in Peace—Deflects the Air Toward the Ceiling and Provides Ventilation Without Drafts—Small Lower Sash Provides Access to Screens and Awnings

BY CHARLES BUTLER, ARCHITECT, NEW YORK CITY

THE hinged window, of which large and small scale details are shown herewith, is the result of considerable experiment, and is offered to hospital people as a suggestion of real practical value.

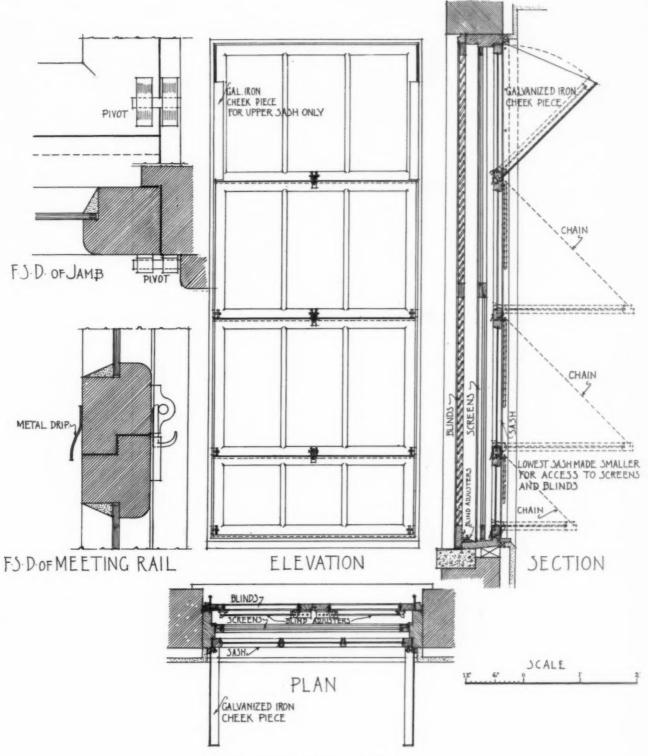
My first experience with this type of window was in the British Red Cross, St. John's Guild Hospital at Etaples, France. In this hospital the upper sash, only, opens, an arrangement which is feasible in the damp, cold climate of the French coast.

The especial advantage of the hinged sash swinging in, with its cheek pieces at either side, is that the air is deflected toward the ceiling so that a bed may be placed directly under the window. This is a very valuable feature in a war hospital ward, where beds often crowd together; a light frame covered with cheesecloth set on top of the opening is an added protection from overdrafts.

When the War Demonstration Hospital was planned at the Rockefeller Institute in New York, the same type of window was used, but each sash was arranged to open, to meet the requirements of American summer weather. Incidentally, the same type of window was adopted for doctors' and nurses' quarters, and, after a year of service with temperatures ranging from 102 degrees above to 13 degrees below zero, the army officer in charge stated to the writer that he approved of this type of window, not only for wards but also for all other rooms in the hospital.

One disadvantage of the window as it was originally designed was the difficulty of getting at outside blinds and mosquito screens, as when the lower sash was opened it extended so far into the room that it made it difficult to reach them from inside. It was therefore decided to place a small sash at the bottom of the window to allow access to blind adjusters or awning cleats and mosquito screens. This small sash can also be used when slightly open as a bottom ventilator.

As will be noted on the drawing, the hardware is of the simplest sort, consisting, as it does, of two friction hinges which cost only a few cents each; a snap catch on the lower sash, which en-



Plan of hinged window for hospital use

gages a bar on the sash above; and at each side of each sash a chain long enough to let the sash swing in to a horizontal position, but with a screw hook at each side into which a link of the chain may be hooked when it is desired to open the window part way only.

This general type of sash was employed in the

new naval hospital at the New York navy yard, a permanent structure, where the thickness of the walls obviated the necessity of cheek pieces.

I believe that this window, while originally designed for war conditions, will give equally good results when applied to permanent hospital construction.

#### CONSOLIDATION OF HOSPITAL SERVICES\*

#### Centralization Especially Valuable in Training of Nurses—Dangers of Too Much Red Tape in Welfare Work—All Services Better for More Cooperation

BY LOUIS J. FRANK, SUPERINTENDENT BETH ISRAEL HOSPITAL, NEW YORK CITY

HE hospital is not, or should not be, an insti-I tution which acts without coordination with the public, and stands apart as a place of punishment for those who have transgressed the laws of nature, either through ignorance or guilt, just as the gaol punishes those who have broken manmade laws. It is the present tendency to make even penal institutes places of moral education rather than of corporeal revenge, with the policy of "teaching how to walk in the path of righteousness" substituted for the sterner legal dictum of an "eye for an eye and a tooth for a tooth." How much more, then, should a hospital aim to teach its patients what the penalties are for breaking the mandates of hygiene and how to live so as to avoid illnesses and conserve the health of the public!

When we talk of the hospital, we mean also the dispensary, the social service department, the nursing staff, and the district service staff. You can not deal with the one without involving the other. They are so entangled with each other that to attempt to disentangle would mean to destroy the whole fabric. In reality, all these are only branches of the same trunk, and, just as the health of the boughs and body of a tree is interdependent, so the efficiency and benefits derived from a hospital depend upon the coordinate and cooperative efforts of all its departments.

The patient who leaves the hospital is not discharged from its care until fully cured and restored to a state of complete working efficiency, or, if it is found that he is chronically ill and cannot be cared for properly at home, until he is referred to an institution for permanent care. Patients leave the hospital when they no longer need the bed, but many still need treatment and are referred to the corresponding department in the dispensary, so that they may be seen from time to time by the physician in whose care they were while in the hospital.

Perhaps we have a patient seeking admission to the wards whose physical state precludes his transfer from his home. In such an event the treatment is carried on at the home by the physician, the nurse, and the social worker, until the patient is in a condition to endure the fatigue of the journey to the hospital. It may be we have to do with an individual who is suffering from heart disease. In the happy-go-lucky days of old it was customary repeatedly to admit and discharge such a patient in accordance with the state of compensation and decompensation of his heart. Why these breakdowns of his health, few bothered to investigate. We all know that his final admission was his final exitus.

Now hospitals, through the social service department, seek to investigate what causes there are in the homes and workshops of their patients to bring about these periodic breakdowns. It is frequently found that some external factor, like the floor to which the patient must daily climb to get to his home, or the physical exertion of his burdensome occupation, is the cause responsible. In such a case the employer can usually be induced to change the position of the patient from one of heavy labor to that of light work not entailing heart exertion.

There is no effect without cause. Radical excision of an infective lesion is the best treatment. We need no charity to cure the ailments of poverty. We need justice.

It is for the state to prevent the causes that bring disease and want by the enactment of minimum wage laws, by the provision of work for the handicapped as well as for the able, by forcing medical attention upon the people in order to prevent dissemination of disease and to preserve the working efficiency of the breadwinner, by preventing bad housing, and, especially, by education. The Jewish people do not know the word "charity." Our concept of service to the less fortunate is justice. That word is the equivalent of charity in the Hebrew language.

The question of pauperization should not be considered by the institutions in their work. When we are confronted with disease, we must do all we can as promptly as possible to stamp it out and prevent dependency. When we are confronted with want, we must, without any loss of time, furnish the necessary relief to prevent sickness and death. The question of pauperization is a vital one from the viewpoint of the community. The employers must be educated to pay their employees living wages which include doctors' and nurses' care. And here is where federation can render a service of lasting moment to the people.

What boots it if a man gives a large sum of

<sup>\*</sup>Paper read at the New York Academy of Medicine, April 2nd, 1919. The subject of the meeting was "Would hospitals supported by a federation function more satisfactorily if consolidated and directed from a central office?" The writer spoke on the following topic: "The advantages and disadvantages of such a consolidation from the standpoint of nursing service, training of nurses, hospital social service and dispensary service."

money to the federation and takes it away, and more with it, by compelling his underpaid employees to depend upon the free service of the federated institutions to take care of himself and his family?

In welfare work, as in the political state, centralization of authority has the advantage of strength, but is encumbered with all the failures of bureaucracy, of petty officialdom, of the lack of touch with actual conditions in remote territory. The liberty of the individual, his enthusiasm, and his sympathy for the work are sacrificed when power is vested in an individual only impersonally interested in the immediate problems of the locality. On the altar of centralization have been sacrificed the happiness of many corporate bodies, their liberty, and their effective cooperation. In the very idea of centralization is its weakness, for it breeds revolt and protests and dissatisfaction in all those subject to its autocratic decisions.

I sometimes wonder whether it is not better to create a more humble atmosphere where charity, or rather justice, is to be administered and where the depressed are to be comforted. I would hide the cold, glassy marbles; I would conceal the brilliant, chilling colors, and gloss over the brass and the tinsel ornaments with a more somber, homelike hue, and those that are downhearted and anxious would feel as if they entered a house where their language will be understood, their sorrows consoled, and their illnesses cured.

It is essential that the workers of a certain locality have sympathy with the racial characteristics of their clientele, with their religious customs, and with their likes and dislikes. This can be only if the system is a decentralized one. The patient will have learned from previous experiences or from the experience of his neighbors how well he will be treated by the welfare workers and how utter his reliance ought to be on their kindness and good judgment.

The hospital must be the health center of the district in which it operates, and it must make use of its dispensary, its district service, its social service, its nursing service, and its convalescent home to complete its work.

When we realize what has been told us by the government, that one-third of the people subject to the draft were rejected because they were physically unfit, an appalling situation is presented which demands serious thought.

As a health center, the hospital would render its utmost services to the community. By seeking the cooperation of the physician and by educating the public, we could so arrange that each hospital would be like another Life Extension Institute. Here the ailing would seek counsel and the physician instruction. The poor sick would come here to the out-patient department, or would be referred to the ward. From this establishment the social worker would endeavor to aid and improve the home surroundings, and, if necessary, food and clothing, and nursing and medical attention would be furnished at the house of the patient.

With the city arranged in zones so that each institution was in charge of a certain district, no overlapping would occur. This arrangement would also be a means of suiting the tastes and religious scruples of the community. In my opinion there is no question of sectarian segregation. It is a fact demanded by the people. Build non-sectarian institutions, and the people will unite and build another one to suit their peculiar likes and dislikes. A religious Jew would rather die at home than go to a non-kosher hospital.

It seems to me that the hospital should cater to the wants of the community, by endeavoring to teach the local members of the medical profession all that is new in their art. It is frequently the case that the physician loses all his connections with medical progress on the day of his graduation from college. The doctors of the vicinity should be informed of the weekly clinics and lectures held in the hospital. They should be told that the hospital is ready to make any examination-x-ray or laboratory-of any patient they may have, either free of charge or at a nominal And the thought should be especially instilled in the minds of the medical men that they can, if they so desire, make every sick room in the vicinity part of the hospital.

The dispensary is an integral part of the hospital institution. A patient that comes in to the admitting clerk should be assigned either to a bed in the wards or to a clinic in the dispensary, where the same physicians are in attendance. As institutions are at present constituted, the patient gets very dubious treatment in the out-door department. Examinations are seldom thorough, diagnoses are made on very slim evidences, and treatment is usually limited to a laxative or a styptic, etc. This great fault is due to various causes. The physician sees no advantage to himself in joining the dispensary as an assistant. He derives no financial support from it, nor does his store of knowledge increase. In fact, he looks upon the dispensary as his enemy, who steals his means of livelihood. When he has made, let us say, a diagnosis, and the patient has been transferred to the hospital wards, he has no opportunity of learning the course of the disease, whether his diagnosis was correct, how the true

diagnosis was arrived at, or what was the ultimate outcome.

Assistant attending physicians should be in charge of the out-patient department. The staff should be so increased that thorough individual examinations of all patients would be feasible. It should be the duty of the dispensary physician to teach prophylaxis. The word doctor means "teacher" rather than "physician." If, with his "rhubarb and senna," the medical adviser would mix some words of wholesome counsel, the effects produced would be very much more lasting and would redound to the benefit of the generations unborn.

Admission to the dispensary should be more discriminate. It should not be possible for a patient able to pay the medical man his office fee to make a charity case out of himself by secreting his good clothes and telling his wife to hide her jewels. The social service department should investigate each case in doubt, and a campaign of education of the public should be entered upon to teach them to be ashamed of this dishonesty. The dispensary should treat only cases of the neighborhood, and, upon removal of the patient to another locality, a copy of the history records should be transferred to the dispensary of that vicinity. In this way overlapping would be avoided and much time and labor saved by the physician in reaching his diagnosis.

The education that the patient will receive in the dispensary should be such as will teach him the futility of wandering from clinic to clinic and obtaining in many institutions medications and treatment that counteract each other and conflict with one another. If a spirit of confidence is instilled in these patients—and this can be done only through education—they will refuse to exchange physicians and thus themselves help in the benefits to be derived from the dispensary. Under a compulsory system of confinement to zones, the patient will not have confidence in the dispensary of the district and will either go without treatment or use improper means and methods to secure therapy in another clinic.

Arrangements should be made to take away from the dispensary physician his clerical duties. The time that it takes him to fill out the various cards and to extract—and sometimes it is a very laborious extraction—the history of the patient could much more profitably be employed by him in the physical examination. Each clinic should have its paid clerk, who should attend to this work. With the Federation in existence, there would be no question of an institution being a poor one and unable to do all that a so-called "rich" institution can do. If the federation

should find that a certain necessity exists for the creation of these paid positions, all the institutions that are federated would receive the proper apportionment of funds to carry out this project. The public is always willing, if convinced of the urgency of a certain expenditure, to foot the bill. They only demand to be educated.

There should be no necessity for volunteer workers, but for the time being, and under the present conditions, a school should be organized by the federation, to teach, not theoretical philanthropy, but the practical workings of those engaged in charity welfare. Those interested in doing good for the community might, after a due course of instruction, give of their spare time to an institution to which they would be assigned, and thus aid materially in the efficiency with which work could be quickly accomplished.

The social service worker of the hospital is a medical specialist. Her exertions are just as essential as those of the therapeutist in charge. No medication helps if the more important conditions of unsanitary surroundings, improper food, or lack of food, etc., are not remedied. Of all the departments connecting the hospital and home, the social service bureau is the most important. Of what good is it to take an individual and place him in a hospital and expect him to recover from an attack, say, of heart disease, when his brain is worried and his nerves are on edge all the time as to what is going on at home? He is the sole support of his family and he has left his wife and little ones to face starvation. Such a patient's convalescence is much prolonged and the ailment is sometimes incurable because of the patient's lack of mental repose. The Beth Israel Hospital recognized this fact in 1902, proving itself the pioneer in this field, three years before the Massachusetts General and four years before Bellevue Hospital followed suit. It was found that by having kind, earnest, and patient women investigate the home conditions of the breadwinner, and assure him that his dear ones are being taken care of, the recovery of the patient is enhanced and his stay in the hospital much shortened.

It is necessary, in many instances, not only to provide treatment, but to see to it that the patient gets the treatment. Many ailing people refuse to go to the hospital or dispensary because of the time involved which takes them away from their work. By a follow-up system we can see to it that each patient comes as often as is necessary. A clerk should check up the number of visits each patient makes, and, if he fails to report, someone should be sent to his home. By tact, and sometimes by beneficial intimidation, the patients are induced to report regularly.

I am opposed, as I have stated, to centralization of certain efforts which will hinder rather than aid our work. But I strongly favor consolidation for the purpose of education. As a federated government, the states of our union are always jeal-ous—and properly so—of the authority vested in Washington. But for purposes of hygiene, protection, etc., affecting the entire community, they relegate to the central government seat all their vested powers.

So do I think that, for the instruction of the nurses, consolidation is urgent.

The nursing staff training in the various hospitals needs much reform. I can not see why any small hospital should be a training school for nurses. Why not have a college where girls will be taught the theory of nursing, and where assignments will be given to the various students for clinical work in the various hospitals? this way the nurses will receive varied training which will make them capable of taking care of all types of diseased individuals. They will get a course in infectious diseases, mental diseases, chronic diseases, etc., by being assigned to various institutions for different periods. This procedure will make more efficient nurses, since the average standard will be raised. It will also decrease the expense of having a teaching staffsometimes of markedly inferior caliber-in each hospital. The surroundings and circumstances of the nurses' work must be changed. It is an anachronism to expect women to work twelve hours a day, when common laborers are now demanding even less than eight hours' work a day. This condition will ultimately be changed. The number of nurses must be so increased that it will be feasible to make each nurse work not more than eight hours a day.

As things are at present constituted, the nurse is exploited for the benefit of the hospital. She is made to work for months at tasks which could easily be performed by a servant girl. She taught how to wash the sills, the walls, how to remove the contents of the bedpan, and how to act in general as a maid should, not because she needs this extensive training—she can learn it all in a much shorter time—but because the hospital desires to save the money that would have to be expended in securing additional servants for the wards. Eliminating this unnecessary work will reduce the length of time of training the nurse.

Nursing service, nowadays, is limited to the very rich or the very poor. The individual of moderate means—who resents being a burden on the community—can not afford to engage nurses during a period of illness. Some arrangement should be made to take care of these people of

the middle class. We speak and plan for the proletariat. Those of the upper classes speak and plan for themselves. For the ordinary bourgeois family—until the ideal conditions obtain—the pretense of respectability and the desire not to fall in the estimation of the neighbors act as a restraint against calling in the aid and assistance of those engaged in social service.

It seems to me that with equal rights and equal privileges, women should render equal service. It is right and proper that the state should so train them that they will be able to render the greatest service to the community. The question of health has always been neglected. Health, like truth, is naked, and brooks no compromises. All human beings must be taught how to take care of the body, sex hygiene, and how to bring up children to become healthy, normal men and women.

It is my theory that all women should be taught nursing—the practical as well as the theoretical sides of the art. In our present system of education we make all arrangements to give our pupils a smattering of various subjects, from the culinary art to music and drawing, with the result that the pupils who do graduate from our public school system neither know practical housewifery nor possess an artistic temperament. The question of health is almost entirely overlooked. The little that the pupils do get along lines of hygiene and sanitation does not at all prepare them for their duties of wifehood and motherhood.

All women at the age of sixteen should be required by law to spend the necessary time in the study of nursing. At that age, a girl is mature enough to appreciate the lessons that she will be taught. She will learn how to take care of sickness, how to prevent disease, and how to take care of her family during periods of illness. The girls physically or temperamentally unsuited for such training will be, of course, exempt.

Such training will receive partial credit for advanced study along other lines. Should the graduate nurse desire to become a lawyer or physician or engineer, etc., the time that she spent in the nursing school will count as part of her preliminary education.

The influenza pandemic and its complications was one of the most destructive visitations of disease in the history of our country. The success of the officials in checking the ravages of the disease was due in no small measure to the services of women, trained and otherwise, who acted as nurses. With a larger number of nurses, the disease would have been checked sooner and the list of victims would have been considerably reduced.

This question is an urgent one at the present moment. We have not a sufficient number of nurses to take care of the illness and disease that has arisen incident to the demobilization of the army. Many of our young soldiers are ill with wounds inflicted not by Mars but by Venus, and the trail of sickness in the wake of the army needs thousands of nurses with the supply limited. As an urgent war measure and as a measure of reconstruction it is essential that this matter receive early action.

I have been informed by Dr. H. Dwight Chapin that as chairman of the health committee of the Reconstruction Commission of the Governor, he will recommend that the state devise means and methods for the training of practical nurses—not registered nurses—whose fees will be more moderate than those of the reguraly trained nurse, and who will greatly help the middle-class families. Acting along similar lines, the Rockefeller Foundation has inaugurated an investigation of the training of nurses and has appointed Prof. C.-E. A. Winslow, of Yale University, to report on this subject.

There is good and evil in all of us. It is only by learning our faults and endeavoring to improve them that we can better ourselves. What is good in the individual and the individual institution should be picked out and cherished.

By a central office of instruction and by frequent conferences, the welfare worker would be taught how to improve his methods, and would learn of newer practices elsewhere. A system of standardization should be inaugurated for the dispensary, for the clerical department, for the social service work, etc., which will be rich in information and will yield instruction to those that seek knowledge.

There should be no attempt made to force standardization upon the individual, but if the methods are truly good the individual will see the goodness of what lies behind and will voluntarily adopt it. We can not accomplish things by force. Education is our only weapon.

The future seems pregnant with marvelous possibilities.

#### A PLAN FOR THE LABORATORY TRAINING OF NURSES

Method Adopted by the Muhlenburg Hospital Increases the Scientific Training of Nurses to Qualify Them for Office Positions and Post-Graduate Technician Courses—Value and Service of Clinical Laboratory Extended—Pathological Interns Used to Best Advantage

BY HENRY J. GOECKEL, PHM.D., PATHOLOGIST AND BIO-CHEMIST, MUHLENBERG HOSPITAL, PLAINFIELD, N. J.

I N common with other hospitals, the war brought forth for us the problem of a shortage in interns and a probable increase in hospital service due to the extensive war industries in our zone of activity.

We were fortunate, however, in being able to keep up the quality of our classes in nursing. Our present first-year class members are all high school graduates, and 25 percent of them have completed from one to five years of collegiate training. This gives us a class of students desirous and capable of receiving a higher grade of instruction than that attempted in many training schools.

Among other innovations, we aim to prepare them in such a way that they can, with advantage to themselves and to the institution, elect a practical course in the clinical laboratory during their third year of training. To this end, they receive, during their first year, a sixty-hour course of lectures, demonstrations, discussions, and written quizzes on physics and chemistry. The course is thorough and extensive—a complete university course in terms and illustrations of every-day hospital service. The lectures are broad and general.

The discussions aim to bring out the application of and relationship to other branches of their training. The written quizzes are given with the specific intention of emphasizing and fixing in their minds things of particular importance. The written quiz is used in preference to the oral method, as it teaches the students to express their thoughts—a decided essential for the nurse.

In the second year they receive a course of lectures and demonstrations on clinical laboratory examinations and bacteriology, explaining the most frequently employed tests, the bacteriology of all the important infective diseases, and the relations of bacteriology to surgery. The relation of bacteriology to sanitation is brought out more fully in the course in Social and Personal Hygiene, which is studied later. The students are led to see the value of the microscope by having the normal histological tissues exhibited in conjunction with the course in anatomy and physiology during the first year, and the more striking pathological tissues, bacteria and urine sediments during the second year.

At the end of the second year they are in a position to receive a course of half-day periods in

the laboratory, making the routine analyses of sputum, blood, etc.

By this plan we are able to relieve the pathologic interns of many hours of routine work. (The interns are assigned to more advanced analyses, and, if they show enthusiasm and aptitude, to research work.) We likewise turn out graduate nurses who are capable of taking positions in the offices of physicians, who are qualified

to be of service, and who can therefore command good returns for their labor. We believe that there is a demand for such trained nurses and that the demand is bound to increase. Our nurses also derive an additional advantage from this training in that they are ready, at the end of their three years of study, to take advantage of the post-graduate technician course, which is offered if they so desire.

#### LITTLE JOURNEYS TO PLACES "OVER THERE"

### Six Bases at Beaudesert Center, Bordeaux—Low Rate of Mortality—Occupations in the Wards—American Red Cross Hospital Huts Are Centers of Good Cheer

BY MARGARET J. ROBINSON, R.N., WITH THE AMERICAN RED CROSS, FRANCE

THERE are six bases at Beaudesert Center, and the center as a whole has cared for as many as 18,000 patients at one time. The center was so planned that if the war had continued 40,000 patients could have been provided for by a gradual addition to the barrack and tent capacity. Single bases reached a census of nearly 5,000.

The base hospitals are much alike in construction and administration, and the description of one of these will give a picture of the units of the hospital center at Beaudesert, if one remembers that practically the same structural conditions and administration and living conditions are simply multiplied as each base is added, or as the capacity of existing bases is enlarged. Each of these bases, at the time the bases had reached their highest capacity, had sixty-four wards of wooden construction, and as many as eighty tents of the regulation hospital type. Each unit had twenty-eight auxiliary buildings. Sixty motor ambulances were in service at the center for the transportation of the ill and wounded from trains to hospital barracks, and again to trains or ships for embarkation from the port.

After visiting the American Red Cross hospital hut, which is described later, we crossed the duckboards, which make passage possible through the seas of mud, to the administration building. There is the usual barrack construction for administrative offices: the offices of the medical officer in command, his assistants, the clerical force for the administration, and the offices of the chief nurse.

In her office the chief nurse proudly showed us her desk, which had been made in the carpenter shop by convalescent patients in the reconstruction classes, and in the hall she called our attention to a memorial tablet in black wood with gold lettering, also the work of patients, carved with the names of the hospital staff and personnel who had died in service there. There were six names on the tablet.

For the sake of sequence, we began our trip of the hospital with the receiving tent. When a train arrives at Beaudesert, the soldier patients are admitted first to this barrack. Here each man is examined and assigned to special quarters according to his injury or illness. Complete history cards are made here for filing in the administration offices. The bath house is in the next barrack, and patients are bathed before being sent to the wards, stretcher cases receiving bed baths, and the men who are able, a tubbing.

The ward barracks have from thirty-six to fifty beds. The wards are all assigned to special types of cases; there are medical and surgical wards, amputation wards, fracture wards, skin wards, genito-urinary wards, isolation wards for influenza, pneumonia, diphtheria, and various types of contagion. The contagious ward, of course, has its own special base and plants for special disinfection, and its isolation and surgical technique are most stringent and thorough. Each ward is well provided with wash rooms, toilet rooms, offices, and service rooms.

Each base has its its own laboratory facilities, x-ray equipment, complete surgical equipment for operative procedures, dental offices, bathing barrack, administration barrack, officers' mess and living quarters, quarters for nurses and for corps men, kitchens and commissaries, mess halls, repair shops, and, last but not least, the Red Cross recreation huts, where the convalescent patients may get out of the hospital atmosphere and find comfort and wholesome amusement.

The bases are in charge of administrative medical officers and men who specialize in each line of work to which they are assigned, as far as it is possible to do so. The nursing forces are from the American Army Nurse Corps, recruited

through the Red Cross and under the direction of the chief nurse. Trained women reconstruction aides are employed by the army to do the work in occupational therapy, and large numbers of hospital corps men and enlisted men detailed for such service make up the personnel of the bases.

One of the most interesting features of the base hospitals at present is the work being done in occupational therapy. Entering one orthopedic ward, we saw an animated card game in progress on one bed. The occupant of the bed could use only one hand and arm, but he was getting along

famously. The second player also had one arm in splints, and the third was balancing excitedly on two crutches. They tell me that lighting a cigarette and managing a hand at a poker game are the first mechanical movements after eating that bring to the handicapped soldier the im-

pulse to begin life and work again after his injuries begin to heal, so I suppose we may also consider poker and cigarettes in the line of occupational therapy.

In a bed next to the card game was a man with one arm out of commission and almost useless fingers on the good hand, making a beautifully woven bag on a small hand loom, which itself had been made by handicapped patients. Near the weaver sat another boy with about one and one-third of his hand efficiency, who was carving a tea stand with a landscape top. Farther down the line two hands with stiffened fingers were becoming flexible again while making a most artistic belt of Roman colors, and, from the farther end of the room, the occupational aide brought us a box which had originally held cigars and now bore vivid blues picturing stalks of spring flowers and a fascinating Alsatian girl on the cover.

Certain reconstruction aides, assigned to the work of physiotherapy, were massaging stiffened scar tissues around apparently useless joints. When the scar tissues become more pliable, joint movements follow, and, in many cases, comes a gradual return to usefulness of the joint itself.

On our way to the kitchen barrack and mess hall, we stopped at the reconstruction carpenter and forge shops. In these shops salvaged lumber had provided the material for the carpenters' benches, chairs and dressing tables for the nurses' quarters, and besides tables for the wards. A forge had been built at one end of the shop, and tools and splints were made from salvaged bed standards and old metal. The shoes of the personnel are mended here, too, and all the work of the shop is done by handicapped men who need reeducation or occupational therapy. The kitchen barracks are called "kitchen barracks" in correct army terms and the dining room is called the "mess hall." The doughboy, however, calls

the whole place the "chow tent." This particular kitchen was feeding 3,100 people. There are huge army coal ranges and a long row of kettles for cooking large quantities of food. They are built much like the usual stock pot, and each one has its own fire of wood or



Fig. 1. (At the top) The American Red Cross farm at Beaudesert, Captain Guinness of the United States Army in charge. (In the center) While a crowd of American soldiers are waiting to get into the American Red Cross recreation hut, Base Hospital 114 at Beaudesert, near Bordeaux, Lieut. Guy Owsley, A. R. C., stands on a soap box to tell them where and how the American Red Cross Home Service can help them. (Below) Facial ward at the American Red Cross Hospital, Beaudesert.

coal. A big Dutch oven, built by the hospital working force, does all of the baking. There are bread-mixers, bread-slicers, and other kitchen machinery. The bread room is stacked high with huge loaves. The bread is baked at the rate of one pound a day for each man. The walls of the room

are scrubbed down daily, as well as the cement floors and furniture.

A blackboard keeps the daily census of patients and the amount of food to be sent to wards and quarters, with the menu for the day. The supper being served as we went through the kitchens consisted of salmon croquettes, cheese potatoes, peas, had become very proficient in assisting the surgeons, especially in plaster work. The surgical buildings are heated by steam. The reflecting lights over the operating tables had been made by regulation issue army mirrors placed at an angle of about 45 degrees, with three 100-watt nitrogen lamps hung in them.



Photo from Western Newspaper Union

Fig. 2. Illuminated cross displayed over base headquarters No. 2 at Bordeaux, France.

boiled onions, tea and bread, and rice pudding with raisins in it.

There are ice houses, cold storage for meat and perishable foods, vegetable rooms, and dry storerooms. The kitchen force consists of officers and non-commissioned officers in charge, doughboy assistants, Boche prisoners, and some French women dishwashers. In the mess hall near the kitchen, convalescents able to be up and about freely were eating supper.

The dispensary barrack contains record offices, laboratories, throat and nose rooms, and dental offices. The surgical barrack has completely equipped operating rooms, anesthetic rooms, plaster room, and complete radiographic rooms. The sterilizing rooms have the usual apparatus of a good hospital at home, but instead of the shining nickel, the sterilizers were all in dull aluminum finish. We were told that the hospital corps men

There is a special barrack for sick nurses awaiting evacuation from the port. The Red Cross has helped to make this barrack as comfortable and attractive as possible, with real trays and table china, painted walls, pretty curtains, and flowers at each bed.

A part of one barrack is used for the fitting of artificial limbs, and here the patients who have undergone amputation are taught to walk. The occupational workshop has some really beautiful rug-weaving, raffia embroidered baskets, character toys, and all sorts of clever things made by the men in that class work.

The empyema barrack was especially interesting. It was found at first that these patients did not do well scattered about the base in medical wards, so a special open-air barrack was constructed for them, with its own operating room for resections and its own isolation technique.

The men here are given special food and supplementary nourishment, bottle blows twice each day, deep breathing exercises, and reconstruction movements by the aides to prevent arm-joint and



Fig. 3. A canteen where the convalescent men get sandwiches and coffee between meal hours.

muscle stiffening. As a result the mortality has been reduced, the percentage of recoveries has been raised, and the time of recovery hastened.

The nurses and nurses' aides and other women personnel at the hospital have their own recreation hut. Afternoon tea is served, and dances are given at regular intervals. The nurses' dining room has stenciled walls, decorated by the soldier patients, and curtains made of salvaged burlap embroidered by the men.

During the rush of the great drives on the front, convalescent patients and reconstruction aides worked on the wards. Doctors and nurses of



Fig. 4. Convalescent American soldiers playing billiards in the casino at Vittel, the famous French watering place. This room is one of the many run by the American Red Cross to give our boys some of the comforts of home.

the staff give enthusiastic praise for their help, and say that they worked heroically and cheerfully during many long hours and with the finest spirit of cooperation. Some of the statistics at Beaudesert are little short of miraculous. One base, which has cared for as high as 4,596 patients at one time and has been in use since September, 1918, during the whole of the great fall drive, shows a death rate of only 0.25 per cent. The base handling the contagion of the port, which has also been in operation for the same length of time, has not lost one case of influenza, not one case of diphtheria, nor one of scarlet fever. In fact, with the exception of some hopeless third-stage tuberculosis cases which came to the base just about in time to die, there have been only two deaths at this base.

In spite of the fact that temporary barrack hospitals necessarily lack the perfection of permanent institutions, one realizes that the right essentials of hospitalization are all here and that American ingenuity, efficiency, and conscience are constantly at work to produce the best results



Fig. 5. A game and an interested audience.

for the ill and wounded American soldiers at this port of embarkation.

AMERICAN RED CROSS HOSPITAL HUTS REMIND THE BOYS OF HOME

The first American Red Cross hospital hut was opened in July, 1918, at A. R. C. Hospital No. 5 at Auteuil. Seven more huts at different bases were opened later in the same month. As sufficient women personnel began to arrive from America to care for this special Red Cross activity, more huts were added at bases where the need of them was shown. On January 1, 1919, ninety-two huts were in operation, involving the use of 274 personnel.

These huts came into being as a definite activity of the American Red Cross, when it became evident that wholesome recreation and social life were absolutely necessary to the good morale of the convalescent soldier. The testimony of the soldiers themselves has proved that the hospital

hut has helped to make life bearable to the convalescent soldier, who is of necessity depressed and homesick.

The huts were in most cases built by the army and were of the usual army barrack construcand homelike as possible, to make them a distinct contrast to the mud and rain and mists of France, and a contrast to the routine army life in trenches and barracks. This was done only after much hard work and many difficulties, but the results more than justified the labor.

The directress of one hut says: "The hut was gloomy, so we have painted the interior a battle-ship green and the top walls a pale green, with the dividing line of brilliant yellow, and have curtains and lamp shades to match. We have potted plants and hanging baskets and English ivy."

Here is another report: "When we have spare





Fig. 6. (Above) It is from a pleasant place like this that the men in the Red Cross huts write home. (In the center) This phonograph concert out of doors seems to be enjoyed. (To the right) Officers' club at Issoudun.

tion. The huts were decorated, furnished, and staffed by the Red Cross. The army in most cases furnished a detail of workmen to keep the huts clean and do heavy work which could not be done by the Red Cross women personnel. The hut served in all cases as the headquarters of the Red Cross at that base, where the Red Cross, representing the people at home, could come into personal touch with the men and furnish to them comforts and pleasure beyond what the routine life of the army could give them.

It was realized by the Red Cross that one of the most important things necessary to the success of the huts was to make them as attractive minutes we spend them in looking at the hut, and we have been known, after patients and detail have gone to bed, to turn on the lights just to feast our eyes. Owing to the success of the alterations and decorations of the head aide in occupational therapy, we may believe with fair grace when people tell us it is the most beautiful

hut in France. There are wings ten feet wide running its whole length. This has made the proportions beautiful. From the uprights, holding the trusses of the main roof, we have hung the flags of the allies. The effect and the coloring are splendid.

"The walls are a deep burnt orange and the uprights, as well as the structural supports of the roof, are stained dark brown. The box seats running the length of the wall and the bookcases are dark brown also. The window curtains against the orange wall, and the benches scattered about, are a vivid blue—a colorful background and effective setting for khaki. Large pleated yellow shades give a golden glow to the hut when they are lighted. Halfway down one side is a huge fireplace of dark blue brick, a huge American one—it warms the heart of every cold American who enters the hut. An architect disguised as a corporal designed the fireplace as a freewill offering."

Each hut is operated by women, from one to fifteen, as the size of the hut and the number of men to be served requires. There are a circulating library, class work, commissary canteen, parties, hot drinks served, moving pictures, Y. M. C. A. entertainments, and amateur bands and minstrel shows, concerts, and human sympathy dispensed by the workers when asked for or needed.

The American Library Association assists the Red Cross in furnishing books and magazines, and a trained librarian systematizes the book and magazine distribution and attends to the stationery.

Several huts have enthusiastic French classes, one a class in stenography, another a class in dancing, and there are also a glee club and orchestra practice, handwork, and toy making. In one hut toys were made and given to the French children of the village. In front of the big maps on the wall there is always a group which might be called the geography class.

When there is no army commissary at the base, the hut performs its service, and at certain hours of the day the men may buy tobacco and cigarettes, towels, razors, chocolate, and other things. Special food treats are given several times a week. The things that are served are the kind never got in a chowline—doughnuts, cake, fudge, ice cream, hot cocoa, sandwiches, or homemade coffee.

Most of the huts have a stage with curtains, scenery, and footlights made by the patients, and every night sees an entertainment, either professional or amateur. Community "sings" and dances are always popular. During the day the

men will play games, play the piano, or sit around the fireplace and read, and on Sundays the chaplain conducts service and everybody sings.

A home communication bureau worker usually has an office in the hut or visits it periodically, and men who are worried about back pay, allotments, sickness at home, or no news from home, get connection with some movable machinery to stop the worry, and get comfort by telling their troubles to a sympathetic woman's ear.

Hut workers go with the army rolling kitchen to the hospital trains, and the wounded men are served with hot drinks and cigarettes and nut-bar chocolate.

One hospital center has an ice-cream room made by the boys, with a cork-lined icebox with trough and drain made of tin from cigarette boxes. Ice cream is made here every day for ward patients. One hospital hut has a special diet kitchen where invalid diets are prepared.

Here are one day's statistics from Vichy, which had the largest hospital hut in France:

Dance attendance	150
	,
oup or conce or cocon berianism.	.500
Cups of coffee or cocoa served	,500
Tobacco line at commissary 1	,500

I went out in a rattling little old Ford through a pouring rain from Bordeaux one day to Baudesert Center. Hospitals, bare barracks set down in seas of mud with board walks between, are not very cheerful for a steady, everyday environment.

Then I entered a door and came into another world—another atmosphere.

There seemed to be acres of soldiers—standing, sitting, coming in and going out. The place hummed with talk like an afternoon tea at a woman's club. The hut was the one described earlier in this article, the one with the orange walls, brown rafters, blue tables and curtains. The whole place was warm. In one corner at a booth a young woman in bright blue uniform was giving out books and writing paper. In another corner a boy was playing ragtime. At each end of the room stood a table and a big blue enameled urn with a tap, and women in blue were pouring out cups of steaming chocolate.

I noticed one entrance door where the boys coming through were all on crutches, or had lost an arm or leg, or had arms or legs still in splints or dressings. This door was kept clear just for them, so that they could take their time getting in and not be jostled or crowded. I noticed, too, that when they came in some other boys always made way for them or jumped up and gave them the best seat by the big fireplace or the writing

tables or let them take first place at the library booth.

A boy sitting on one of the benches stopped me as I passed and asked me where he could take the slip he held in his hand, which read:

3 handkerchiefs

1 tooth brush 1 sweater

Mary--

Head Nurse, Ward -

I told him to wait, and I asked one of the women pouring chocolate about it, and I heard of another fine thing. When a man is broke and needs things and the nurse of the ward finds out about it, she signs an order like this, and this order is filled without any payment at the Red Cross storeroom in the hut. So I went back and took the boy with the crutch to the storeroom window. Eight hundred cups of chocolate were served that afternoon; eight hundred boys came in to the warm fire; eight hundred boys, homesick and depressed by injury or illness, came out of the barrack hospital atmosphere and into the one created for them by the people at home through the American Red Cross.

#### FROM OUR FIELD EDITORS' NOTEBOOKS

### Practical Suggestions From Fall River Hospital—Interesting Ward Construction—Transferable Double Doors Found Useful at St. Luke's, Chicago

Union Hospital, Fall River, Mass.

When I called at the Union Hospital, Fall River, Mass., the other day, I was greeted by its new superintendent, Dr. Appleton W. Smith. Dr. Smith was formerly superintendent of the Hartford Hospital, Hartford, Conn., and has been at the Union Hospital about three months. As I was escorted about the buildings, I noticed a number of excellent things. For example, on the ground floor the wings of the main building, which run north and south, are divided lengthwise into two wards containing eight beds each, instead of being constructed as one ward to contain sixteen beds. By this method of ward construction, the beds are placed between the windows and the patients face the wall between the wards, instead of the glare of opposite windows. This plan also permits a more accurate classification of patients, while, at the same time, it enables the nurse to control both wards from her desk in the approach. Solariums are at the south end of each wing and can be entered directly from each ward. Each ward, moreover, has an attractive fireplace. Every-other window on the porch side of the wing is carried down to the floor, door-like, thereby permitting the beds to be wheeled in and out of doors readily with a minimum amount of travel. The call system is extended to the porches.

I was glad to see a limited number of well-chosen pictures hanging on the walls of the wards, as well as potted plants tellingly placed here and there, and artificial nasturtiums giving a touch of brightness. The walls are tastefully decorated in light green.

The hospital is equipped with the indirect lighting system, and there are detachable electric lights for each bedside. All radiators rest on wall brackets. Besides the customary accessory rooms connected with the wards, there is a room reserved for cases requiring special care.

Linoleum floors prevail throughout the hospital, except in the solariums, the main hallways, and some of the rooms accessory to the wards.

One of the interesting rooms of the hospital is the library and record room on the second floor of the central building. Here is a small but up-to-date medical library, to which the physicians and other workers in the hospital have ready access. The room was erected by Charles H. Dring and Caroline A. Dring, in memory of their father, Charles P. Dring. A bronze tablet on the wall states this fact, and ends with the legend:

"A skilled mechanic
A successful manufacturer
An honored employer
A trusted official
A worthy citizen."

The top floor of the main building beside housing the operating suite, has a small isolation suite quite apart from the rest of the institution. It consists of two rooms, a small kitchen, a bath, and utility rooms.

In 1917 the hospital opened its new building, the Stevens' Clinic, but this is another story, and must be told in a longer article.

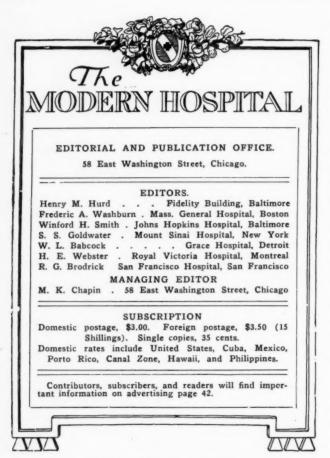
#### St. Luke's Hospital, Chicago

One of the little devices that help to make St. Luke's Hospital notable for comfort is the transferable double door, by means of which any room may be made sound-proof. The doorway of each room is provided with two sets of hinges, one on the inner side for the permanent door, swinging in, and the other on the outside, for the temporary door, swinging out, and hung whenever the patient needs to have all sound absolutely excluded. Both doors are provided with checks which prevent them from being slammed.

The phonograph is used in taking histories—in fact, St. Luke's was one of the first hospitals in the country to use this method of taking down histories. The admitting officer dictates the previous history to the machine; the roentgenologist, the surgeon, etc., likewise dictate their portions of the record, and typists take them off on the history sheets. It has been found impracticable, however, to have the interns use this method.

St. Luke's was also one of the first hospitals in the country to make anesthesia a separate department and to offer training to medical men and women who wish to become qualified anesthetists. As a matter of fact, the only candidates for this training are women, for men, as a rule, regard anesthesia as a non-permanent career, but merely a stepping stone.

The wonderful orthopedic department of St. Luke's (the largest in the country except that of the Hospital for Ruptured and Crippled in New York) was briefly mentioned in this department some time ago (July, 1918, p. 27), and we hope before long to publish an extended description of it by a member of the staff.



#### Herbert Burr Howard

Dr. Herbert Burr Howard retired from active service as superintendent of the Peter Bent Brigham Hospital of Boston on May 1, 1919. Since his graduation in medicine from Harvard in 1884, he has been continuously in hospital administration, with the exception of a few early years of professional work. A portion of this professional work was in private practice at Idaho Springs, Colorado, and a portion was at the State Almshouse, now the State Infirmary, as assistant physician. Dr. Nichols speaks as follows of his professional work at Tewksbury:

"He made an enviable record both as physician and surgeon in the hospital wards where there averaged two thousand cases admitted per year and also displayed rare ability and understanding of the difficult problems of treatment and management in the wards for insane patients who averaged four hundred daily. Well-grounded in medical science and well-skilled in his practice, he combined with these qualities, courage, sound judgment, and, above all, a wonderful personality which won the affection and admiration of his patients. Wholesome good nature seemed to radiate from him as he passed through the wards, and no one could be more sincere and gentle in their words of comfort and sympathy in the wards, to the children, the feeble or the suffering patients, and to the anxious or sorrowing relatives or friends. In all the successes he has made nothing has exceeded his success as the skilled, kind, and faithful physician when first assistant at the state almshouse. Nowhere could

hospital patients receive more humane care than under Dr. Howard's direction."

In 1891 Dr. Howard was made superintendent of the State Infirmary at Tewksbury. During this administration an extensive program of construction was adopted and executed. He thoroughly organized the training school of this institution.

In 1897, when the Massachusetts General Hospital was looking for a resident physician, the attention of the trustees was directed to Dr. Howard's work and he received the appointment. Here he remained until 1908. His prestige and that of the hospital rose together during that period. In this year the trustees of the Peter Bent Brigham Hospital were looking for a superintendent. They needed a man big enough and with the experience to build a complete modern hospital and to organize and equip it. They were peculiarly fortunate in being able to induce the one man best fitted for the task to accept it. The history of his success is known to all. He remained superintendent of this hospital until his recent retirement from active service.

Dr. Howard became interested in the problem of the care of the insane while assistant physician at the state infirmary. He has continued this interest and given the state valuable public service as trustee of the state colony for the insane at Gardner and member and chairman of the Massachusetts state board of insanity.

Dr. Howard is so well known to the hospital world that this attempt to describe his work and mention some of his manifold activities is superfluous for many of our readers. It cannot possibly cover the whole field. He is an excellent business man. His vision has been keen and its scope broad when he has viewed hospital policies, were they questions of the care of patients, medical education, the training of nurses, or the construction of buildings. At each of his hospitals one has but to consider any one of these points fundamental to a modern hospital, to convince himself of the truth of this. Dr. Howard was one of the first to provide facilities for moving the patients' beds out of doors. The verandas and wide doorways at the Massachusetts General Hospital are eloquent witnesses of his teaching. At the Peter Bent Brigham Hospital he has worked out a ward unit which is a model of convenience and comfort for patients, nurses, and physicians.

His interest in medical education has been shown by his ready cooperation with medical schools and teachers in admitting students to the wards and in the construction at hospital expense of class rooms and laboratories for students. He believes and preaches that medical teaching in hospitals reacts favorably upon the sick because of the necessity for increased vigilance and study on the part of the teacher when working under the keen eyes of students. He has always encouraged research in hospitals provided that the interest of the patients was carefully guarded.

Dr. Howard's attitude towards nurses' education and nurses' welfare is best indicated by the large number of friends he has in the ranks of nurses. When he first came to the Massachusetts General Hospital in 1897 the conditions of the nurse's life were very different from what they are today. Their hours of duty were long, their food was very plain, and they did much manual labor in the wards now done by ward maids. These conditions have changed all over the country, but Dr. Howard, with the help of his superintendent of nurses, Miss Pauline L. Dolliver, was a pioneer and leader in this work. He is still known among the older graduate nurses of the Massachusetts General Hospital as the man who first gave the nurses fruit and cream on their breakfast table. The high standing of the training schools at the Massachusetts General Hospital and at the Peter Bent Brigham Hospital bear witness to his ideals for nurses.

In hospital construction Dr. Howard's ideals have always been for simplicity and practical utility. The main buildings constructed by him at the Massachusetts General Hospital are the domestic building, the surgical building, and the out-patient building. Each of these at the time it was built was a step in advance of any previous hospital construction for its purpose and all effectively fulfill their functions today. The Peter Bent Brigham Hospital is a witness everywhere of the simple, practical, efficient man who planned it.

Dr. Howard is a big man physically. That he is also great in the essentials of character is best shown by the warm loyalty and affection of the men whom he has trained and the officers and employees who have served under him.

FREDERIC A. WASHBURN, M.D.

#### The Value and the Limitations of Standardization

We publish this month a paper on this subject which is of exceptional interest because of its illuminating discussion of principles. This is Miss Isabel M. Stewart's article in the Department of Nursing on "Possibilities in Standardization in Nursing Technique," which will well repay reading, even by one not specifically interested in nursing.

Standardization; Miss Stewart reminds us, depends on the possibility of ascertaining, by scientific observation and study, the most highly efficient methods of performing work. Once such a standard has been adopted, the individual workers may depart from it in the slightest particular only at risk of impaired efficiency. Manual labor, under necessarily fixed conditions-brick-laying, for instance, or any of the vast number of operations conditioned by machinery—is peculiarly adapted to such standardization. The moment, however, that the problem is complicated by varying conditions, impossible to foresee and embody in a formula, and only to be met by resourcefulness and ingenuity on the part of the one actually doing the work-that moment real standardization becomes an impossibility, and pseudo-standardization a stumbling-block to efficiency. Nothing can be more disastrous than complacent reliance on a standardized stereotyped course of procedure in situations that require, instead, insight, understanding, and ability to adapt action to the need. None the less, even in such emergencies, a basis of judgment is necessary. That basis of judgment is provided in a firm grasp of principles.

Now, as Miss Stewart says, the possibility of standardizing much of nursing technique should not be ignored. Time, energy, and material expense could be saved by the elimination of useless elaboration. Scientific study which might lead to such saving should be welcomed.

On the other hand, very few of the problems with which nurses are confronted "can be solved by the manual dexterity alone or by any machinery which can be automatically set in motion." The very fact that every patient is different from every other patient—that every disease is different from every other disease—that every case is in some respect different from every other case of the same ailment—that every case is surrounded by different circumstances—all these facts make it impossible to provide a ready-made, stereotyped solution for every problem, or to accept a clockwork automaton as the ideal nurse. The real nurse must have personality, she must have brains, and she must exercise both in her work. Moreover, having both, she is very likely to require opportunity to exercise them, for, as Miss Stewart further reminds us, the more human a human being is-the further removed from a cog in a machine—the more insistantly that person's nature demands the opportunity to put individuality into his or her work. It is necessary, therefore—and this applies not to nursing alone, but also to every form of work that demands intelligence—to fall back on principles rather than mechanically standardized forms of procedure.

"The conclusion seems to be, then, that while we need to study our methods much more carefully and need to work out our procedures on a scientific basis so far as possible, we do not want to insist on any rigid adherence to set forms of technique. So long as certain fundamental principles are observed, it would be an advantage rather to have at command a variety of methods, and it would always be important that we should be able to adjust them readily to suit varying needs and conditions. Our standards would be used not as rules to be followed but as guiding principles or standards of reference."

# Taking Stock of the Human Investment

Every hospital has a very considerable investment in the human elements of the organization. The time that has been spent in training employees, the mistakes from which they have learned, the gradually increasing fund of experience which they have gained in the service of the institution-all this represents an investment none the less real, though the outlay has been unnoticed. Books are difficult to keep with these human values, and therefore they are sometimes overlooked. And yet the difference between the success and the failure of a hospital may be just the difference between ability and inability to control the returns from these intangible assets. If there is a season in the year more subject than another to a slump in these stocks, that season is summer. Now is a good time, therefore, to go over accounts and see whether or not these investments are bringing in a satisfactory return, and, if not, why not.

Is every employee in the institution putting not merely his time but his heart and his soul into his work? Is the one who does not the exception or the rule? The success of a hospital is ninetenths personality, and nine-tenths of that personality radiates from the superintendent. If perfunctory, spiritless performance of tasks characterizes anything like the majority of employees, the cause is probably one that is common to all, and the superintendent of that institution will do well to address some heart-searching questions to himself—such, for instance, as:

Am I myself putting my heart and my soul into my work? What kind of personality do I infuse into my subordinates and associates? Does my joy in my work overflow into appreciation of the work of my staff? What effect has my passage through a room on the people at work in it? Do they shrink in dread of a fault-finding which, deserved or not, is likely to descend on their heads, do they hasten to pretend an industry and attention which were not visible before and which will vanish the moment my back is turned, or are they really glad to see me, and will they, after I have gone, work with just a little bit more zest and interest because of the added vim I have imparted to them?

One thing more: If the answers to these ques-

tions don't add up to give the balance you want, don't hand in your resignation. Try this: See that every one in the institution (yourself included) has a vacation that will at least afford a chance to bring that person's stock to par. Perhaps you have all run down in efficiency without appreciating it; you may have been realizing only 50 percent of your potential value. Get away from your work altogether; get away from the petty worries and tribulations that fog your vision and keep you from the sight of the stars; get out into a larger world and a wider circle of interests, and try to come back renewed and invigorated not merely in physical health and strength but also in courage and ideals. Then see if the books don't balance.

# Portrait of a Lady (Early Victorian)

If Florence Nightingale could have chosen the year of her birth, one wonders, would she have selected that which followed Queen Victoria's? Certainly, birth in no other decade could have brought her to maturity just in time for the great work for which she seems to have been destined. Also, scarcely any other time could have presented a more maddening thicket of obstructions to that work. Very nearly every early-Victorian tradition of "woman's sphere," not to speak of the lady's sphere, blocked her way. "It was not by gentle sweetness and womanly self-abnegation that she brought order out of chaos in the Scutari hospitals," says her latest biographer<sup>1</sup>—who, indeed, also says that "a demon possessed her."

Well, Scutari was a hell, and a demon was needed to cope with it. We credit ministering angels with vast stores of pitying grace, but not so much of the practical common sense and energy with which devils are popularly endowed. The singular lesson of Scutari seems to be, in fact, that hells are made by the stupidities and blundering ineptitudes of commonplace, fairly well-meaning mortals, and that it takes demoniac fires to purify them. All this, however, is aside from Mr. Strachey's brilliant portrait.

Born into a wealthy and socially well-placed family, at a time when it was almost disreputable—at least quite unimaginable—for a woman of good social position deliberately to choose any career of usefulness outside her own family, Florence Nightingale was irresistibly impelled toward a vocation which actually was followed then only by the dregs and offscourings of womanhood. The very perversity of madness it seemed for an attractive young woman, with every opportunity in the world for making a bril-

<sup>&</sup>lt;sup>1</sup> Strachey, Lytton: "Florence Nightingale," in "Eminent Victorians," G. P. Putnam's Sons, New York.

liant match and living happily ever after. Yet, in spite of "social duties" exacted of the most unwilling denizen of the social paradise into which she had been born, in spite of the shocked resistance of her family to all her preposterous desires —in spite of the most benumbing influence of all, that intense despairing melancholy which sometimes besets frustrated or unfulfilled genius-in spite of all this, "she yet possessed the energy to collect the knowledge and to undergo the experience which alone could enable her to do what she had determined she would do in the end. In secret she devoured the reports of medical commissions, the pamphlets of sanitary authorities, the histories of hospitals and homes. She spent the intervals of the London season in ragged schools and workhouses. When she went abroad with her family, she used her spare time so well that there was hardly a great hospital in Europe with which she was not acquainted, hardly a great city whose slums she had not passed through. She managed to spend some days in a convent school in Rome, and some weeks as a sœur de charité in Paris. Then, while her mother and sister were taking the water at Carlsbad, she succeeded in slipping off to a nursing institution at Kaiserswerth, where she remained for more than three months. This was the critical event in her life. The experience which she gained as a nurse at Kaiserswerth formed the foundation of all her future action and finally fixed her in her career."

At length her still bewildered family gave way in exhaustion. With incredible perversity, Florence had steadily declined all inducements toward what was, in the early-Victorian view, a reasonable life for a young woman born in the lap of fortune. In her thirty-fourth year she became superintendent of a charitable nursing home. A year afterward came the Crimean War.

"The whole organization of the war machine was incompetent and out of date. The old duke had sat for a generation at the Horse Guards repressing innovations with an iron hand. There was an extraordinary overlapping of authorities, an almost incredible shifting of responsibilities to and fro. As for such a notion as the creation and the maintenance of a really adequate medical service for the army-in that atmosphere of aged chaos, how could it have entered anybody's head? Before the war, the easy-going officials at Westminster were naturally persuaded that all was well-or at least as well as could be expected; when someone, for instance, had the temerity to suggest the formation of a corps of army nurses, he was at once laughed out of court. When the war had begun, the gallant British officers in control of affairs had other things to think about than the petty details of medical organization. . . Thus the most obvious precautions were neglected, the most necessary preparations put off from day to day. . . . Errors, follies and vices on the part of individuals there doubtless were; but, in the general reckoning they were of small account -insignificant symptoms of the deep disease of the body

politic—the enormous calamity of administrative collapse."

It might seem almost a miracle that that inert mass of self-satisfied official incompetence ever permitted an amateur—and a woman at that—to reach the base hospitals. Now, however, was the time when Miss Nightingale's social position, so long a shackling weight, began to be useful to her career. Sidney Herbert, now at the war office and in the cabinet, was her intimate friend and thoroughly convinced of her great ability. Thus it happened that, to the mingled bewilderment and disgust of the military officials, she went to Constantinople accompanied by thirtyeight nurses, with funds from private sources at her disposal amounting to about thirty-five thousand dollars (which were further augmented by large sums of money collected by the London Times) -and with an official appointment and the War Office at her back.

"Want, neglect, confusion, misery-in every shape and in every degree of intensity-filled the endless corridors and the vast apartments of the gigantic barrack-house, which, without forethought or preparation, had been hurriedly set aside as the chief shelter for the victims of the war. The very building itself was defective. Large sewers underlay it. . . The floors were in so rotten a condition that many of them could not be scrubbed; the walls were thick with dirt; incredible multitudes of vermin swarmed everywhere. And, enormous as the building was, it was yet too small. It contained four miles of beds, crushed together so close that there was but just room to pass between them. Under such conditions, the most elaborate system of ventilation might well have been at fault; but here there was no ventilation. The stench was indescribable. . . . The structural defects were equaled by the deficiencies in the commonest objects of hospital use. There were not enough bedsteads; the sheets were of canvas; . . . there was no bedroom furniture of any kind. . . . There were no basins, no towels, no soap, no brooms, no mops, no trays, no plates . . no knives or forks or spoons. The cooking arrangements were preposterously inadequate, and the laundry was a farce. As for purely medical materials, the tale was no better. Stretchers, splints, bandagesall were lacking, and so were the most ordinary drugs. To replace such wants, to struggle against such difficulties, there was a handful of men overburdened by the strain of ceaseless work, bound down by the traditions of official routine, and enfeebled either by old age or inexperience or sheer incompetence."

Against this dark background stands forth one figure—that of the lady whose very presence there seemed to the honest officials so incongruous as to be ludicrous.

"Her position was, indeed, an official one, but it was hardly the easier for that. In the hospitals it was her duty to provide the service of herself and her nurses when they were asked for by the doctors, and not until then. At first some of the surgeons would have nothing to say to her, and though she was welcomed by others, the majority were hostile and suspicious. But gradually she gained ground. Her good will could not be denied, and her capacity could not be disregarded. With consummate

tact, with all the gentleness of supreme strength, she managed at last to impose her personality upon the susceptible, overwrought, discouraged and helpless group of men in authority who surrounded her. She stood firm; she was a rock in the angry ocean; with her alone was safety, comfort, life. And so it was that hope dawned at Scutari. The reign of chaos and old night began to dwindle; order came upon the scene, and common sense, and forethought, and decision, radiating out from the little room off the great gallery in the barrack hospital where, day and night, the lady superintendent was at her task. . . .

"Certainly she was heroic. Yet her heroism was not , the romantic sentimental heroism with which mankind loves to invest its chosen darlings; it was made of sterner stuff. To the wounded soldier on his couch of agony she might well appear in the guise of a gracious angel of mercy; but the military surgeons, and the orderlies and her own nurses . . . could tell a different story. . . . Beneath her cool and calm demeanor lurked fierce and passionate fires. As she passed through the wards in her plain dress, so quiet, so unassuming, she struck the casual observer simply as the pattern of a perfect lady; but the keener eye perceived something more than that-the serenity of high deliberation in the scope of that capacious brow, the sign of power in the dominating curve of the thin nose, and the traces of a harsh and dangerous temper . . . in the small and delicate mouth. . . As for her voice, it was true of it, even more than of her countenance, that it 'had that in it one must fain call master.' Those clear tones were in no need of emphasis: 'I never heard her raise her voice,' said one of her companions. Only, when she had spoken, it seemed as if nothing could follow but obedience."

Of the end of the nightmare—of the mortality rate reduced from 42 per hundred to 22 per thousand—of the long after-life during which Miss Nightingale from a sick-bed reformed the army medical department, improved conditions in infirmaries and workhouses, founded the training of nurses, advised statesmen, and at her own pleasure received generals and princesses—and incidentally wore out or killed her closest friends with overwork—of all this there is no space to speak here. For this we must refer readers to one of the most remarkable biographies of the year, in Mr. Strachey's gallery of "Eminent Victorians."

# Success of the Blind as Masseurs

There is at least one field in which blindness is far from being a handicap. This is the vocation of massage. In Japan, it is said, massage is an occupation reserved for the blind exclusively. St. Dunstan's Hostel, London, England, has of late been very successfully training blind masseurs, as is attested by the following letter to Sir Arthur Pearson from General Robert Jones, director of the Liverpool military orthopedic hospital.

"The work which your blind masseurs do is very exceptional in quality. They are in every sense of the term a great success. I find them all intelligent and possessed

<sup>1</sup> Described by Mrs. Sidney McCallin in The Modern Hospital, October, 1918, XI, 295.

of a wonderful gift of touch, together with keen enthusiasm for their work. Apart from their qualities of masseurs, I think they have good psychological effect upon their patients. I consider institutions which secure the services of those trained at St. Dunstan's very fortunate."

This letter, it is said, furnished the incentive for the initiation of the class for blind masseurs in Chicago, described by Mrs. McCallin on another page of this issue. This, too, seems well on the way toward success—a most gratifying testimony to the value of the work in which St. Dunstan's has been a pioneer.

#### Some Good Advice

The Presbyterian Hospital, Chicago, has the following motto framed and hung where the employees can read it constantly:

"If you work for a man, in heaven's name, work for him. If he pays you wages that supply your bread and butter, work for him; speak well of him; stand by him; and stand by the institution he represents. If put to a pinch, an ounce of loyalty is worth a pound of cleverness. If you must vilify, condemn, and eternally disparage, why resign your position, and when you are outside, damn to your heart's content. But as long as you are a part of the institution, do not condemn it. If you do, you are loosening the tendrils that hold you to the institution, and the first high wind that comes along, you will be uprooted and blown away in the blizzard's track, and probably you will never know why.—Elbert Hubbard."

# THE LATCHSTRING OUT

MISS MARY C. COLLINS, superintendent of Wesley Hospital, Wichita, Kan., brings to this office news of notable improvements in that institution which will increase the capacity of the hospital from forty beds to one hundred and twenty-five.

MISS ELIZABETH WRIGHT, superintendent of Rockford Hospital, believes that the future of nursing lies in the hospitals and in public health work. Accordingly, public health nursing and school nursing are included in the curriculum of the training school of Rockford Hospital. The school affiliates with Michael Reese Hospital, Chicago, and, Miss Wright says, never has trouble in securing an excellent class of material to fill its classes.

Col. B. W. Caldwell of the personnel division of the Surgeon-General's Office, on a recent visit here, voiced a regret for the passing of the old country doctor, with his pony and cart, always at the command of those who wished his help. The only help in the solution of the rural problem, in his opinion, lies in the encouragement of young doctors to go out into the country for the years following their internships. Dr. Caldwell believes that the country doctor is fully as competent as his city colleague. The country doctor has a diversity of experience, but the city doctor is spoiled through specialization.

MISS IDA M. BARRETT, superintendent of Blodgett Memorial Hospital, Grand Rapids, Mich., has a fund of information and experience in hospital affairs which we hope to draw on for the benefit of THE MODERN HOSPITAL readers. At all events, we shall soon publish an article descriptive of Blodgett Memorial Hospital (which is in many ways a unique institution), by Miss Christine M. Hendrie, supervisor of instruction in the training school.

### OUT OF LONG EXPERIENCE

### Dr. H. B. Howard, Retired Superintendent of Peter Bent Brigham Hospital, Talks on What He Has Learned-Accurate Accounts, Spirit of Cooperation, and a Sense of Humor Mean Success

By J. J. WEBER, Associate Director, Boston Dispensary, Boston

Everyone acquainted with Dr. H. B. Howard, who retired on May 1 from the superintendency of the Peter Bent Brigham Hospital, knows that he is a modest man. Consequently it was with little hope of getting him to say much about his own achievements that I called upon him the other day to get a message to hospital workers, especially hospital superintendents, a message that would spring out of thirty years of varied experience in hospital management during a period of rapid expansion and changing methods.

I was anxious to have Dr. Howard tell me something that would be of real value to superintendents throughout the country, and so I asked him what were some of the conclusions to which his long and varied career had led him as to the qualifications that go to make a successful

hospital superintendent.

His first statement took me quite by surprise. "I have an idea," said he, in his customary deliberate manner, "that no one can be a really successful hospital superintendent who is not a good mathematician. He must be able to understand and interpret figures. In short, he must be something of a statistician."

And with this, Dr. Howard stepped into the outer office and came back with a large canvas-covered book, which he opened before us. It was ruled into many columns, each of which bore a caption. As he turned the pages of the book devoted to expenses, I noticed some of the headings: "Brooms," "Cotton," "Gauze," "Repairs to Surgical Instruments." There were pages devoted to income also. From left to right, the book was divided into twelve sections, each representing a month; each of these sections in turn was further divided into six parts, representing a period of six years. This book was first introduced into the Presbyterian Hospital of New York by one of the managers of the hospital, who was at that time purchasing agent of the Harriman system. "I adopted it," Dr. Howard went on to say, "at the Massachusetts General Hospital when I was there as administrator, and later introduced it at the Peter Bent Brigham Hospital. It shows me the various items of expense and income, and enables me at a glance to compare the expenditures under any given item up to any period in the year, and the expenditures of this year or any part thereof, as compared with the expenditures for the same thing in preceding years or any part thereof. It makes me incessantly ask the question, 'Why'? It compels me to search out the hidden meaning of abnormal increases or decreases. In short, it gives me the facts upon which to act intelligently in financial matters.

"Then, in the second place," he continued, "I think a hospital superintendent should have a keen sense of humor. It enables him to maintain an even keel and weather many a rough passage. Without it his spirit would become embittered, and this would be reflected throughout the institution down to the errand boy and the scrub woman. Nothing is so highly infectious as the spirit of the superintendent, not even measles."

"Further, a successful superintendent will spare no pains to get intelligent cooperation from his staff." Dr. Howard went on to illustrate this opinion by citing an incident in his early career as a superintendent, when the

mechanical devices of hospitals were much cruder than they are now. In the hospital of which he was then superintendent, water was being constantly wasted as a result of allowing the water in the slop hoppers to run uninterruptedly. Arbitrary orders accomplished little or nothing, and the water bills continued excessively high. One of the surgeons, moreover, blind to what Dr. Howard was attempting to accomplish, flatly challenged his right to limit the amount of water he was to be allowed to use.

"But, bless you," was Dr. Howard's reply to the surgeon's challenge, "I have no desire to limit the use of water in the hospital; what I want to eliminate is the misuse of water. It's perfectly possible to cut down on water rates 50 percent and still have all the water the hospital needs in order to do first-class work. There is a certain amount of money appropriated for the expenses of the year. If you'll help me to accomplish this result, there will be enough money left to purchase some of the additional instruments and appliances which you need in your department." The surgeon saw the point.

"I won this man," said Dr. Howard, "not by an arbitrary rule, but by letting him see what I was driving at.

You can't stop abuse by abusing the abuser."

He summed it up finally, "I think that a hospital superintendent's success is largely measured by his success in hunting out people who will help, rather than hinder, and having found them, in doing everything within reason to hold them. This applies with double force to those who fill pivotal positions on the staff. A spirit of esprit de corps must be developed which will lead people to stand by loyally whatever the changing vicissitudes, distasteful though they may often be."

# SMITH COLLEGE TRAINING COURSE FOR PSYCHI-ATRIC AND MEDICAL SOCIAL WORK

# Course Requires the Time of Two Full College Years-Separation of Theory and Practice Made Up in Last Two Months' Review

By MARY ANTOINETTE CANNON, Social Service Department, University Hospital, Philadelphia

Last summer Smith College made an academic experiment and a contribution to America's resources in the form of a course of training in psychiatric social work. This course, consisting of two summer months of theoretic work and nine months of practice, turned out about fortyeight graduates, most of whom are now following their calling in military hospitals. Some few have taken positions in civilian hospitals, and other civilian hospitals are eager for workers as soon as they shall be available.

The success of this course, together with the urgent demand for more trained workers, has induced the college to repeat it, extending the time by two months, and to add courses in community organization and general medical social work.

The new courses will begin the first of July, 1919, at Northampton. The first two months will be devoted to an intensive study of psychology, sociology, and the theory of the special subject, whether community organization, social psychiatry, or social medicine. Then will follow nine months of practical work in some hospital social service department or other suitable organization, and the final two months, in the summer of 1920, will again be devoted to theory and to a review of the preceding work. The time spent in the work is equivalent to the classroom time of two regular college years. One month's vacation intervenes between the winter work and the final summer months.

The course differs from those given in schools of social work, first, in point of time, and second, in the arrangement of theoretic and practical work. The separation of theory from practice has been generally considered a grave disadvantage, and is still considered so by most educators. The directors of the Smith College course have added the final two months of review and theory with the purpose of uniting field work and theory more closely than was done in the first course. While this plan still misses the sort of interlocking obtained when each week's work is part academic and part practical, it gains in concentration and especially in the continuity of the field work, the lack of which is a conspicuous difficulty in the courses as given in the technical schools. This is a point of particular interest to the hospital departments which act in the capacity of laboratory for courses of this kind. My experience has included students from the Smith College course giving six consecutive months' full time to work in the department, and students from a school for social work giving sixteen to twenty-one hours a week for from four to eight months, and there is no doubt in my mind that the student who gives full time gets a far better opportunity for development at far less cost of time and energy to her supervisor.

Those who are interested in hospitals know that there is urgent need for trained medical social workers. The hospitals' recognition of this need was expressed in the resolution passed by the American Hospital Association at their meeting of last September, copies of which have been sent to colleges and universities throughout the country. The Smith College course is a step toward meeting this need, and as such commends itself to the thoughtful consideration of all who are concerned with this phase of hospital efficiency.

The Smith College course is under the direction of F. Stuart Chapin, of the department of sociology of Smith College. Miss Mary C. Jarrett of the Boston Psychopathic Hospital is assistant director. Either Mr. Chapin or Miss Jarrett will gladly furnish full information regarding the course and application blanks for those who wish to enroll as students.

#### ALDEN SPEARE MEMORIAL HOSPITAL

# An Operation a Day and Something Over—The Year's Average of this Chinese Mountain Hospital

The operating room of the Alden Speare Memorial Hospital is open to your inspection, but to reach it you must take a trip which might eventually land you in the hospital as a patient! Go to Shanghai, China; thence, brave



Physician performing an operation, assisted by the Chinese male nurse. Notice the flour bag used as a sheet across the chest of the patient.

the typhoons of the China sea; spend a night in the city of Foochow, which has no hotels; take a sampan, or houseboat, at midnight; transfer at 3 a.m. to a rickety, infested launch and endure its discomforts for twelve hours; then spend several days in another sampan, which sometimes has to be pulled through the rapids of the Mintu River by coolies; and, at the end of this appalling trip, you will find the city of Yenping perched high upon a cliff at the confluence of two rivers.

The Alden Speare Memorial Hospital, situated in Yenping and supported by the Methodist Episcopal Church, is but a poor affair, judged by western standards. The ramshackle building looks as if it might collapse if it is not repaired soon. The operating room is crude, and so scarce are supplies that the doctor often has to resort to flour bags in lieu of towels.

But do not despise the hospital. It is the only one in an area of 3,600 square miles, and is the only modern agency ministering to the health of seven hundred thousand people. Its sixty beds are always full, and, during the year 1917, the inadequate operating room witnessed 376 operations. More than three thousand individual patients were treated in that same year.

Two American doctors, C. G. Trimble and J. E. Skinner, and a Chinese male assistant whom they are training, make up the staff. The aim of all medical missions is to make the practice of modern medicine and surgery indigenous to the country where they are established.

China is undergoing an awakening of interest in public health in which the missionary physician is the leader. It is to help in this great movement for the development of modern medical science all over the world that the Methodist Centenary movement will devote more than \$2,000,000 out of its \$105,000,000 world welfare fund to medical work, paying especial attention to the needs of China.

### WHAT "THIRTY-TWO" CAN DO

### Reconstruction Hospital in the Heart of Chicago Alive With Activity—Returning Health Finds Many Outlets

"Come on, Buddy—sure you can. Thirty-two can do anything!" And with brisk determination the speaker, whose uniform showed two gold service stripes on the empty sleeve that flapped at his side, steered his wounded and hesitant comrade safely through the string of passing automobiles to the park bench across the street, where small groups of convalescent soldiers were lolling in the warmth of the sunny April afternoon. Scores of invalided heroes, gathered about the imposing six-story structure, gave a military aspect to the institution which rises in the heart of one of Chicago's busiest thoroughfares and is known as U. S. General Hospital No. 32.

Originally planned as a hotel, the building was in the process of construction when the government call came for its use as a hospital, and only the very finishing touches were applied with the idea that it was to be used in taking care of wounded and convalescent boys. It is situated at the cross-point of a thriving residental and business district, with the the result that the patients are able to enjoy the advantages of both. Life in its great panorama buzzes at its very doors, and the ordinary complaint of hospital camp monotony is unknown.

But the life without is no greater than the life within. From the moment one enters the door, he is aware of the keen air of interest and the lively, up-and-doing atmosphere which pervades the institution. True indeed was the "buddy's" remark that "thirty-two can do anything!"

Thirty-two assuredly does do anything—and everything. The boys may be wounded, gassed, or the victims of shell shock, but they are far from being out of the race because of their disabilities. Every one of them, from the crippled hero of the Marne who was sketching a lady on the coat hanger he had carved from a remnant of the discarded lumber pile to the husky-lunged "newsie" who sped down the hall in his wheel-chair with the evening papers, was very noticeably "up to something" (as one of the boys expressed it), and was putting all his energy into the accomplishment of his task.

The real work of the institution is done by men of the U. S. Army who are stationed at the hospital and who live in barracks two blocks away. They, too, seem obviously happy and content. In the mess hall, for instance, which occupies a large corner of the ground floor, several of them accompanied the dishwashing process with the whistling of spirited tunes, while another sang outright as he scrubbed the long wooden tables and mopped the cement floor. Opening from the mess hall is the dishwashing room, equipped with modern machinery, and directly beyond is the main kitchen. Here five ranges were going full blast and three cooks stepped about briskly in the preparation of the evening meal. One of them assured me that the task of feeding 450 boys just back from the battle line with appetites keenly appreciative of American dishes, was not an easy one. Much can be accounted for by food, it is said, and one can not wonder at the "pep" displayed throughout the institution considering the exceptionally well-prepared and appetizing meal which was later distributed to the boys. It consisted of vegetable soup, baked spaghetti, American fried potatoes, sweet potatoes, celery, sliced tomatoes, head lettuce, bread, butter, jelly, strawberry shortcake, and coffee.

Beyond the kitchen is the main diet kitchen, in which two cooks and the hospital dietitian work in conjunction with the diet kitchens on each floor. A shoe-shining parlor, a carpenter shop, and the hospital laboratory complete the ground floor—except for the "menagerie," as the boys term it, where the baby guinea pigs squeal and the white mice make the funniest of noises.

The main floor is the administrative floor of the building, containing, as it does, the receiving office, the offices of the colonel and adjutant, and those of the Red Cross and quartermaster, as well as the receiving room and storeroom for supplies. Patients are received at the ambulance entrance, after which their histories are taken, they are given a shower bath and receive clean clothing, and are assigned to the rooms on the upper floors. All clothing is put through the sterilizer erected in the rear of the hospital. Litter cases are taken up on the spacious freight elevator, which is quite convenient to the entrance.

Busy indeed is the Red Cross corner on this floor, where eight permanent workers extend an offer of help to each and every patient of the institution. Here the Home Service man receives all those who are in trouble and wish advice or aid of any kind; here the librarian, who is a worker of the American Library Association, distributes books of every variety to those who care to read; and here the head of the Red Cross recreational department plans the parties, entertainments, auto rides, vaudeville performances, and dances which are weekly scheduled to drive away the "army blues." In order to give the boys the very latest textbooks on the trades and professions, as well as the best in fiction and lighter literature, the American Library Association has made arrangements with the Chicago Public Library to obtain any book in that huge institution within twenty-four hours from the



Reconstruction Hospital No. 32, Chicago

time it is requested. A catalogue of the best novels of the war has been especially prepared for the boys by a representative of the American Library Association.

The upper floors are devoted chiefly to the wards and the department offices. The second floor contains numerous two-and-three-bed wards, the contagious ward, and the headquarters of the physio-therapy department, where thirteen sunny-dispositioned aides administer massage treatments. During the month of March a total of 4,900 treatments were dispensed, which is an inspiring figure when considered in the light of health force returned to American fighting men. The northeast corner of this floor opens out into a roof garden, where a course in calisthenics is given each morning from 10:30 to 11:30 for patients for whom such treatment has been prescribed.

The third floor contains the offices of the orthopedic chief, surgical chief, and medical chief, the quiet business-like atmosphere and cheerful aspect of which characterize the hospital as a smoothly-functioning institution. A large portion of the floor is given over to the headquarters of the reconstruction aides, which includes the offices, classrooms, and a small library where the aides may obtain books in regard to their work.

The dentist's office and the eye-ear-nose-and-throat departments are located on the fourth. Three dentists and two assistants are kept busy attending to the mouth matters of the patients and handle on an average thirty-two cases a day. All work is done without charge. The eye-ear-nose-and-throat department treats on an average forty patients daily, the majority of the cases being ear and throat. Operations requiring only local anesthesia are done in this department, while those in which general anesthesia is necessary (nose cases, mastoids, eye operations, etc.) are handled in the operating room upstairs.

A ward of six beds is set aside on the fifth floor especially for negro patients. Here a sturdy darky fighter leaned over his cot and scratched his head in deep thought as he penned a letter to the Sunny South. About twenty colored patients are receiving care at the hospital, but the others are scattered through the wards.

The two large wards (one of 75 beds and the other of 50) occupy the greater part of the sixth floor.

The wards are done in light gray. Light gray is the color scheme throughout the institution, with the exception of the operating room, which is white. The x-ray department and operating suite occupy the remainder of the sixth floor. The records of the x-ray department show an average of twenty cases a day.

# THE FULL-TIME STAFF IN THE ORGANIZATION OF THE SMALL HOSPITAL\*

The Geisinger Memorial Hospital Serves Large Rural Community—The Full-Time Staff Group Makes Diagnosis Possible—Unique Methods in Philanthropic Service

"If two rural hospitals are opened in towns distant from each other, one with a fixed trained staff, the other of the usual open type permitting all physicians, irrespective of their training, the use of its beds, but with all other conditions equal, the first or fixed staff institution will accomplish twice the good of the second," says Dr. Harold L. Foss, superintendent of Geisinger Memorial Hospital, Danville, Pa., writing in a recent number of the Pennsylvania Medical Journal. "A hospital run merely to furnish a group of surgically ambitious but surgically untrained men an opportunity to experiment can attain but little in the community and surely no fame beyond a certain questionable amount within the confines of its own town. In the large cities where competent internists, surgeons, and specialists are plentiful, the visiting staff scheme is, of course, the one par excellence, but one of the best solutions of the rural problem is the organization of thoroughly equipped, modern institutions supplying large contiguous areas and administered by trained, permanent resident staffs."

The demand for hospitals of this type and the practicability of the plan of operation has been proved, in Dr. Foss's opinion, by the success of Geisinger Memorial Hospital, which has been established over three years.

Danville, Pa., where the hospital is situated, has 7,500 population, and for over a century had existed without a hospital, a lack which caused little or no concern to anyone. Patients obviously requiring intervention were often sent to Philadelphia, but most patients were treated at home, obscure cases being handled symptomatically, without definite diagnosis.

"At the end of the first year it (the Geisinger Memorial Hospital) had treated 740 cases, and operations to the number of 541 had been performed with a mortality of slightly over 2 per cent. The average number of patients per day had been 29. From its own town it had treated 565 patients, but had also treated patients from 52 other towns.

"The work during the second year nearly doubled and 102 towns other than Danville were represented. A continued increase was maintained during the third year until now, as a total for its first three years, the hospital has records of 3,200 patients having been treated, 2,257 operations performed and hospital service rendered, if represented in figures, amounting to \$178,000. The hospital is now filled and there is constantly a waiting list for private and semi-private rooms.

"In our hospital the new patient, particularly if his condition be vague and the problem of diagnosis not possible of prompt solution, is urged to enter the institution for complete study. The necessity of a thorough and painstaking analysis of his condition is briefly outlined to him and it is only the exceptional patient who does not at once grasp the logic of the argument and refuses to give all the time the physician may require.

"From the patient a complete history is secured and this later dictated from notes to a medical stenographer to be transcribed on the typewriter. Routinely a complete urine analysis and a Wassermann test, in many cases both of the blood and spinal fluid, are made as soon as the patient is admitted. A complete physical examination follows. Should anything in the history or in the examination suggest the possibility of a chest lesion, a pair of stereoscopic plates are made of the thorax.

"In carrying out the idea of the 'grouped diagnosis,' a fundamental principle in the fixed staff idea, the patient passes from the clinician to the pathologist, from the pathologist to the roentgenologist, to the laryngologist and to the surgeon until all data which may be of value have been obtained and recorded on the original history and the final diagnosis made. Though the grouped diagnosis scheme is old, it finds its fullest application only in the hospital so organized that experts, in the various fields of medicine, work in constant cooperation to the end that their researches in the individual case when summed up and coordinated will result in as accurate a diagnosis as can possibly be rendered. This plan has reached its highest development in the Mayo Clinic and the methods of organization and case study in use there may well be copied by any hospital, particularly the one organized along the lines of the permanent resident staff.

"Created as a philanthropy, the methods followed in dispensing charity at the Geisinger Memorial Hospital are unique, I believe, in hospital annals. On the discharge of every patient a bill, as near as possible in keeping with his means, is rendered, but enclosed with it is a notice stating that the holder has the privilege of discussing his account with a committee which meets at the hospital two evenings each month. Nearly every ward patient avails himself of this opportunity and appears at the stated time, bill in hand. He then meets a committee, at present consisting of a lawyer, the cashier of a local National Bank and the superintendent of one of the local rolling mills. The hospital's superintendent is present to furnish information as to the extent of the treatment, seriousness and magnitude of operation, etc.

"A frank statement from the patient, which is, of course, treated confidentially, is solicited and usually is willingly given. In 90 per cent of the cases some member of the committee will know the individual or at least will have certain knowledge of his individual resources. A large group is thus disposed of at each meeting in a manner satisfactory to the patient, honorable to the hospital and in such a manner as to preclude imposing a hardship on a worthy patient, and at the same time rendering it impossible for unfair advantage to be taken of the institution's benevolence.

"Many a patient of limited means, who is unable to pay the bill in full, offers, at the dictates of his pride, to pay in part, or even all if given time, and to these a reduced bill is given or the patient pays in part and gives his note without interest for the balance. Thus in its first three years the hospital returned to patients of our community whose individual financial resources had been carefully investigated, cancelled or reduced bills amounting to \$57,704.

"Always with the paramount thought in mind, that the institution was primarily created for the needy and with ample ward space for all whose means render it necessary that they seek free treatment, the hospital is attracting a rapidly increasing number of pay patients, so that at present receipts from these cases average over \$5,000 per month. All receipts, whatever the source, go directly into the hospital's treasury, the staff receiving no fees, but being compensated on a strict salary basis.

"Many of the antiquated methods employed in American hospitals a century ago, archaic to the last degree, are still in vogue in many institutions and are preserved

<sup>\*</sup>Reprinted in part from a paper read by Dr. Harold L. Foss before the General Meeting of the Medical Society of the State of Pennsylvania, Philadelphia Session, Sept. 26, 1918.

as cherished traditions. The desirability of their change or complete elimination is obvious to the up-to-date hospital administrator, yet any suggestion to that effect usually precipitates a riot. The researches of the American Medical Association, the American Hospital Association and the hospital section of the American College of Surgeons on hospital standardization give great promise of presently relieving many of the ancient ills to which many hospitals have so long been heir.

#### CONCLUSIONS

"1. Although by no means the only practical method, yet the trained, resident, salaried staff scheme of organization, particularly as applied to the hospital of moderate size, may be made immensely successful.

"2. Such a plan is incomparably the best for the rural hospital, especially if a visiting staff of competent and experienced physicians and surgeons can not be secured in the community.

"3. In such a hospital success will depend on certain fundamental principles: (a) a clearly defined need for a hospital in the community; (b) the construction of an adequate and well-equipped institution; (c) a sound financial basis; (d) the organization of an active, capable board of trustees, composed of not over seven men, all experienced in large affairs and accustomed to the practice of broad, scientific, business-like methods (for such a board to be effective there should be no incumbering list of unnecessary rules and regulations, multiplicity of committees or any such obstructing camouflage); (e) a competent and efficient administrator who sees to the maintenance of high standards in the staff; (f) a comprehensive sensible policy, giving the hospital's executive full authority and responsibility in which he has the complete support of the trustees."

### HOSPITAL SMILES

# Sam's Good Luck Began Before His Operation—Nationality and a Thirst That Sought to Be Quenched

By EDWARD H. CLEVELAND, M.D., Superintendent, The Hospital and House of Rest for Consumptives, New York City

Two classes of patients in general hospitals are shining illustrations of that wondrous touch of nature that makes the whole world kin—to wit, our colored brethren and sisters, and the Irish. Sam Craig was fairly recovered after an operation and was preparing to leave a large city institution when a visitor who was interested in the patient remarked, "Well, Sam, I wish you good luck when you go out again!"

The reply, emphasized by a winning smile, was, "Oh, well, ah done had mah good luck befo' ah evah come in!" "How was that, Sam"?

"Well, yo' see, mah wife, she done run away with anothah fellah!"

To be born a philosopher is surely a blessing.

After being disappointed through the failure of a convalescent patient to keep a good position obtained for him as a helper in the store-room of the hospital, the same visitor spoke of the incident to a sympathetic patient, a native of the sunny South, with this comment: "The fact seems to be that more than half the people in the world are to some degree weak in mind, and the rest of us have to help take care of them. Quick as a flash came the reply, "Yassah, yassah! An' the sad paht of it is there's so few of us left!"

A tall, thin, sandy-haired man, of middle age or beyond, sat silently and solemnly in a steamer-chair, waiting for his strength to return. Hoping to bring a smile to a

somewhat grim visage, or at least to brighten a bit the current of his thoughts, a visitor remarked to him casually: "My friend, you look as if you might have a little Scotch in you, as well as Irish, maybe."

The response came quickly, with a twinkle of the eye, "Well, maybe I might, but not yet this morning!"

Which could have been construed as the acceptance of an implied invitation, or a preliminary offer to accept in case of a possible opportunity, and reminds one of, Casey at the banquet: "Is Casey good for a dhrink? Has he had one"?—with Casey's quick answer, "He has! He is!"

## A NORMAL SHOE FOR A NORMAL FOOT

#### Y. W. C. A. Backs Movement to Make Beautiful and Comfortable Shoes Accessible to Women

Can the shoemaker build a shoe that will keep normal a normal foot? And once it is built, will the public be brought to see the beauty of the product? Not so many years ago we gave our admiration to the small, tightly laced waist. Today we laugh at it and tomorrow we shall be equally amused by the pencil-point toes and high heels that tilt the human foot to the angle of a horse's hoof. The war made low heels beautiful on Fifth Avenue, and consequently on Main Street; if it had lasted a little longer, women would, of necessity, have gone the whole way with the shoe problem. The shoes of the future will not be "prescription" shoes; they will not cater to deformities, but they will be built to conform to the normal lines of the foot.

The national board of the Young Women's Christian Associations, through the health division of the Bureau of Social Education, has started a drive to get this shoe for American women and to popularize it. The association have all the health arguments. They have a national membership of four hundred thousand women to listen to them, but they cannot get this shoe without the cooperation of the manufacturers and dealers who make the shoes and determine the styles. To bring about this cooperation, a conference with leading shoe men was held recently at the headquarters of the national board of the Y. W. C. A. in New York.

The manufacturers have a difficult problem, but not an impossible one. They must produce a low shoe, with a low heel and a flexible shank that will allow enough exercise of the muscles of the arch to keep them strong, a shoe with enough room for the toes and a straight inner border, because the foot is naturally straight on the inner side. They must make the shoe attractive to the discriminating taste by using their knowledge of leathers to procure variety and fineness of finish for both day and evening wear. Will the shoemaker do it? When he does, the national board of the Young Women's Christian Association will be back of him. Every woman who wants to wear the "normal line" shoe must be able to get it. All samples of shoes will be examined, an alphabetical list made, according to states and cities, of all the firms that carry these shoes.

This list will then be sent to local associations all over the United States, so that no one can say, "We would like to get these shoes, but we do not know where to find them"

"Ridicule," says some one, "is like a blow with the fist; wit like the prick of a needle; irony like the sting of a thorn; and humor the plaster which heals all these wounds."



Fig. 1. General Ward No. 4 of Madanapalli Sanatorium, where fresh air and an out-door life lure back health to tuberculosis patients of the Far East

# A TUBERCULOSIS SANATORIUM OF THE EAST INDIAN HILLS\*

Picturesquely Situated, It Offers Ideal Advantages to Those in the Early Stage of Tuberculosis—Patients Include Many Nationalities, Races, and Creeds— Well-Organized Plan of Treatment Based on Graded Exercise and Rest

As the train trundles slowly up the small ghat between Madanapalli Road Station and Pakala, the long, low buildings of the Madanapalli Sanatorium stretch out leisurely over the rough hills of the Mysore Plateau. Situated on a small ridge about one hundred feet above Madanapalli level, the sanatorium nestles in the midst of hills that sweep off to the horizon in all directions. To the traveler, these hills are a source of wonder, for the constantly-changing light which falls on them shrouds them in a continual halo of beauty. To the patients, they are the source of life itself, for they afford the exercise in walks and climbing which means to them an early return to health.

The sanatorium is situated at a considerable distance from the station, and the only method of conveyance is the primitive jutka. Trains arrive at midnight and early in the afternoon. As one ascends the plateau from the plain the air grows perceptibly cooler, but it is brisk and most invigorating to the patients who are accustomed to the open-air life. The temperature is fairly even, varying about 20 degrees between day and night. Heat comes on early in the year and at times is quite excessive. In January the range is from 50 to 80 degrees and in May, from 70 to 95 degrees, while the mark of 105 in midsummer is nothing unusual. Almost no rain falls between December and April, but the slow increase from May to November makes the yearly average 27.91 inches.

As the sanatorium is still in its infancy (it was opened July 19, 1915), but few of the trees around it have as yet attained the size which makes them valuable for use as shade, and the winds which sweep over the plateau from April to October are at times quite troublesome and trying. The buildings are surrounded by jungle trees which were originally the size of shrubs, but which, under care, are growing quite rapidly. Planted only two years ago, many of them, such as the rain tree and the flamboya, are already eight and ten feet high. Because of financial conditions, it has not as yet been possible to complete the water scheme, and all water must be carted from a well in the tope at the foot of the hill to the top two furlongs away. Another well on the top level behind a small hamlet directly across the road from the sanatorium and quite two furlongs from the various shelters, furnishes water for the personal use of caste patients and their friends who have received permission to use it.

The sanatorium is designed and equipped for the care

<sup>\*</sup>This article is drawn from information furnished us by Miss A. Tatxe, acting nursing superintendent, whose letter appears on page 468 of this issue.



Fig. 2. Some of the male patients taking special exercise under medical supervision.

of tuberculosis invalids who have a fair prospect of recovery and for patients who, for one reason or another, are predisposed to the development of the disease. This being the case, it is most difficult to arrange for the care of patients in an advanced stage of the disease, and such patients are not sought, as a general rule, since the recovery of convalescing invalids is hindered when a very sick one is in their midst.

The institution consists of five general shelters, containing seventeen beds each, two for women and three for men; fourteen private shelters with separate kitchen, for private patients of any sex or caste; three private shelters with separate kitchens, built more especially for women; four private shelters with separate kitchen, more suitable for gosha ladies; two private shelters with separate kitchen, for Europeans; one general ward of four beds, for Anglo-Indian women; a central administration building; and a conveniently placed lecture hall, in which is a creditable library. Plans have been drafted for an infirmary with an operating room for serious emergencies. This will be of great assistance in caring for patients who, in the course of their stay at the sanatorium, develop severe complications which need careful nursing—and



Fig. 4.—A corner of the European private shelter. The quarters for ward attendants are shown in the distance.

they heard it was a "cough hospital" and, as they had the cough, they decided they must be fit candidates for entrance. Others come in an almost dying condition, and, not wishing to remain under the circumstances, scarcely reach home before death overtakes them. Most of these



Fig. 3. Almost hidden by the tropical trees which surround it is General Ward No. 1 devoted to men.

sometimes an operation—before they can be returned to the open shelters.

As yet there are no chatrams, rest houses, hotels, or travelers' bungalows for the use of friends and relatives who bring the patients to the sanatorium or who come to visit them, and they must drive the four miles into Madanapalli and depend on some friend, acquaintance, or guest house to take them in. A travelers' bungalow and rest houses are most urgently needed and will undoubtedly be among the earliest additions when funds become available. The branch post office at Madanapalli has recently been opened.

Although the institution is intended only for tuberculosis patients in the earlier stages, many incurable ones are, of necessity, constantly received, and the best results will never be obtainable until there are fewer incurable patients, so that all the resources may be devoted exclusively to the care of convalescents. Patients who can ill afford the traveling expense come from distant places, suffering from chronic bronchitis or asthma, in which no diagnosis of tuberculosis can be made. They are kept long enough for a thorough study of their condition to be made and are then sent away with careful instructions. When asked why they come, the invariable reply is that

patients, needless to say, come unadvised or against advice to the contrary. Often it is hard to force the sad truth of "no hope" upon them, and many remain until it is too late to reach their homes before death overtakes them. On the other hand, there are plenty of instances where



Fig. 5. One of the shelters for private patients. To the right is General Ward No. 5 for women.

the discovery is made in time, the business of getting well is entered into with an intelligent good will, and the program of work, rest, or play is followed most scrupulously,

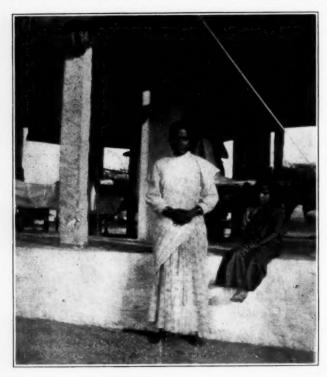


Fig. 6. One of the youngest patients at the sanatorium, with her mother.

with the result that the goal of a complete recovery is reached within a short time.

One of the most difficult problems which faces the sanatorium is what to do for the patient who has recovered from the acute stage of the disease, but whose case is far enough advanced to make a certain cure practically impossible. Under rest, good food, and graded exercise, this class of patients become wonderfully strong and healthylooking, but there will always be bacilli in their sputum. When they recover from their original weak state and are able to take any amount of hard exercise at the sanatorium, they are sent home and return to work. If they are financially comfortable, there is little chance of trouble; but, if they are poor, they return to the very conditions which made them ill. Through the long stay in the sanatorium which such cases require, they have usually lost their positions and must seek others. In the meantime, the friends or relatives who have helped them while in the sanatorium are generally content to lose sight of them, feeling that their duty has been done, although, in reality, that is the very time when their help is most needed, to provide the patient with proper food and living conditions while seeking employment. The sanatorium is unable to follow them up after they have left, and often, because they are not helped to tide over the period of idleness, they fall back into insanitary living conditions and eventually return to the sanatorium with the "cough" advanced to such a stage that there is nothing left for them but death.

A day school, started for the children of the staff and attendants of the sanatorium in July, 1918, has now a total of 21 pupils. The library in the lecture hall has proved of immeasurable service and is greatly appreciated by the patients; in fact, the total of 100 rupees which has been invested in equipping the library with standard

books is considered money well spent, for the volumes have helped to pass many an hour which would otherwise have been most dreary. Through weekly contributions a graphophone has been purchased, for which a supply of records has been borrowed. A magic lantern, presented to the sanatorium by the patients and their friends as a token of esteem, provides pleasant and profitable enjoyment, while the tennis courts and croquet grounds recently opened add much in the way of diversion.

The daily routine is conducted on a well-organized plan. The principle upon which the treatment is conducted that of graded rest to a certain stage, followed by graded exercise and graded work-requires that each convalescent patient should do a certain amount of work according to his stage of convalescence. But the smallness of the staff and the multifarious duties connected with the rapid growth of the sanatorium have made the graded-work program something to be developed in coming years. One real danger in connection with the patients who have to undergo a prolonged period of enforced rest is that, by the time they are restored to health, they will be so accustomed to an idle life as to be unfit for the life of the world to which they must return. This is where graded work proves of benefit, in that it gradually fits the patient for a return to active life, both in the effect it has upon the disease itself and in the cultivation of a taste for work.

Patients are received from all districts in Madras Presidency except Ganjam, from all the native states in South India, and from many distant parts of the realm. The records indicate a constantly increasing number of Mohammedans, Anglo-Indians, and Europeans. Students, housewives, and teachers form a large percentage of the patients. That considerable progress is being made by the institution is shown by a comparison of statistics for succeeding years, such as the following: the positive results percentage for 1918 was 80.09, as against 71.3 in 1917; arrested and improved cases showed a percentage of 60.55 in 1918, while in 1917 they totaled 55 per cent only; the average length of stay in 1918 was 143 days, as against 184.9 the year previous.

The total number of patients admitted in 1918 was 238 (147 male and 91 female), comprising Indian Christians, Independent Christians, Hindus, Mohammedans, Anglo-Indians, Europeans, and Parsee. Following is the range of occupations presented: students, teachers, merchants, clerks, government officials, landholders, servants, wives of vakils, catechists, housewives, missionaries, mechanics, school boys, school girls, carpenters, police constables, beggars, zamindars, quacks, and wandering tribes.

Mr. J. Royal is the catechist and general manager of the sanatorium, and the medical staff consists of Louisa H. Hart, M.D., physician-in-charge; Miss M. E. MacDonnell, nursing superintendent; Miss A. Tatge, acting nursing superintendent; Mr. M. Davis, L.M.P., medical assistant; and Mr. S. David, laboratory assistant.

#### Testimonial Dinner for Dr. H. B. Howard

The list of guests at the testimonial dinner given for Dr. H. B. Howard at the Hotel Biltmore, New York City, May 16, reads like an excerpt from a hospital "Who's Who." Dr. Howard has been for more than ten years superintendent of the Peter Bent Brigham Hospital, from which he has recently retired. "You know, of course," says one of his colleagues, "that Dr. Howard has been one of the most active men in stimulating progress in modern hospital work."

The men who were invited to attend the dinner were Dr. C. Irving Fisher, formerly of the Presbyterian Hos-

pital, New York City; Dr. Henry M. Hurd, Johns Hopkins Hospital; Dr. Winford M. Smith, Johns Hopkins Hospital; Dr. Thomas Howell, The New York Hospital, New York City; Dr. Renwick R. Ross, Buffalo General Hospital, Buffalo; Dr. Joseph Howland, Massachusetts General Hospital, Boston; Dr. Frederic A. Washburn, Massachusetts General Hospital, Boston; Dr. W. L. Babcock, Grace Hospital, Detroit; Dr. Henry W. Pollack, Massachusetts Homeopathic Hospital, Boston; Dr. S. S. Goldwater, Mount Sinai Hospital, New York City; Dr. Charles H. Young, Presbyterian Hospital, New York City; Dr. John J. Dowling, Boston City Hospital, Boston; Dr. Andrew R. Warner, Lakeside Hospital, Cleveland; Dr. John H. Nichols, State Infirmary, Tewksbury, Mass.; Dr. John M. Peters, Rhode Island Hospital, Providence.

#### RED CROSS AGAIN EXTENDS ITS SERVICE

# Will Supplement the Work of the United States Public Health Service in Hospitals at Home

At the request of Surgeon-General Rupert Blue of the United States Public Health Service, the American Red Cross has agreed to provide supplemental comforts and recreation for persons under treatment in the thirty-two hospitals operated by the service throughout the country, the arrangement being designed primarily in the interest of discharged soldiers, sailors, and marines who are being cared for at these institutions. Announcement of the extension of Red Cross home service work to these hospitals, which have a total bed capacity of close to 10,000, came recently from Red Cross headquarters.

In addition to the sick and disabled American fighting men who will enjoy the benefits of the latest activity of the Red Cross, are patients from the following branches of government service, only persons in the employ of the Federal government being admitted to the hospitals of the United States Public Health Service: Army and navy nurses, male and female; patients of the War Risk Insurance Bureau; merchant marine seamen; seamen on boats of Mississippi River Commission; officers and enlisted men of the United States Coast Guard; officers and employees of the Public Health Service; keepers and assistant keepers of the Lighthouse Service; seamen of the Engineer Corps of the United States Army; the personnel of the Coast and Geodetic Survey; civilian employees entitled to treatment under the United States Employees Compensation Act; employees on army transports, not officers or enlisted men of the army.

Red Cross workers with long training in home service work in army cantonments will endeavor to bring all the sunshine possible into the lives of patients, supplying them with such additional comforts as bathrobes, pajamas, socks, sweaters, etc., and arranging for ward entertainments for those unable to get about and more suitable entertainment for those who are convalescent. Moving pictures, vaudeville, band concerts, and motor rides will help make the lot of the patients more endurable. Through cooperation with the American Library Association, the Red Cross will see to it that none of the patients lack reading matter, provision having been made for a regular distribution of books and magazines. Other features of the Red Cross service will be daily visits to the patients, the writing of letters to relatives of the latter and the performing of any task that may tend to cheer Provision has also been made for the entertainment of the nurses and attendants of the hospitals.

The hospitals of the United States Public Health Service are located at Boston; Portland, Me.; Vineyard Haven, Mass.; New York, Buffalo, and Dansville, N. Y.; Wauke-

sha, Wis.; Pittsburgh, Baltimore, Augusta, Ga.; Jacksonville, Fla.; Savannah, Key West, Wilmington, N. C.; Memphis, Tenn.; Greenville, S. C.; Alexandria, La.; New Orleans, Mobile, Montgomery, Ala.; Cleveland, Louisville, Evansville, Ind.; Cairo, Ill.; Chicago, Detroit, St. Louis, Houston, Texas; Fort Stanton, N. M.; Palo Alto, Calif.; San Francisco and Port Townsend, Wash. The hospitals at Evansville and Fort Stanton are for tuberculosis patients.

In his letter to the American Red Cross asking it to undertake the work, Surgeon-General Blue said in part:

"This cooperation is all the more desired owing to the fact that there are certain legal limitations which will prevent the Service from supplying all the delicacies, special amusement features, etc., which the discharged soldiers and sailors are undoubtedly entitled to receive in some way from the community."

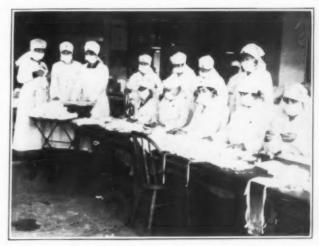
### American Nurses Honored

Ten American Army nurses have been awarded the Médaille d'Honneur des Epidémies by the French Government, according to word that has just reached national Red Cross headquarters. The presentation ceremony took place at A. R. C. Military Hospital No. 112, Auteuil, in the presence of a distinguished gathering, twenty-three officers of the American Medical Corps and seven enlisted men of the army receiving the decoration at the same time.

The nurses honored by France were: Bessie Mae Warwick, McDonald, Pa.; Rose A. Cassidy, Brandywine Summit, Pa.; Karen M. Lauridsen, Astoria, Ore.; Agnes W. Reid, La Crosse, Wis.; Pearl Worley, East Greenville, O.; Edith L. Hadsall, New Rochelle, N. Y.; Lillian E. Radcliffe, Montreal, Can.; Esther V. Hasson, Washington, D. C.; Myrtle Brondel, address not given; Mary C. Gavin, address not given.

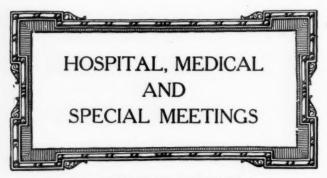
# The Fight With Influenza

Peace came sooner than many people had expected, but the hundreds of women who enrolled in the Red Cross had their chance for service after all. Instead of helping to defeat the Boche they were called upon to fight as grim a battle in the influenza epidemic over here. The great organization of the Red Cross rose to the emergency, complicated though it was by the explosion of a powder plant



Making influenza masks in a Red Cross workshop

in the East and great forest fires in the Northwest. Their work was expedited by the civilian help which was eagerly proffered and which kept the Red Cross workshops full.



OHIO HOSPITAL ASSOCIATION

Fifth Annual Meeting Held at Cleveland, May 20-22— Practical Help and Inspiration in Speeches and Discussion—Commercial Exhibit Proves Success

Dr. A. R. Warner, president of the association, devoted his address to the subjects of hospital standardization and the correlation of the various health activities in a joint program.

#### President's Address

While the war did not directly bring any solution to the problem of hospital standardization, it did add impetus to the movement. Dr. Warner sketched the progress of the efforts which led to the establishment of the American Conference on Hospitals, as outlined in The Modern Hospital, last month and in this issue, and emphasized the need of cooperation on the part of all the agencies concerned in hospital work.

The health program of the country, he said, will be not merely amended but rewritten. As an illustration, he cited the recent legislation passed in Ohio, transferring the control of hospitals from the various bodies which had previously dealt with the subject to the Ohio State Board of Health; giving county commissioners authority to make contracts with private hospitals for the care of the indigent sick; reorganizing the system of local health officers by reducing the number of districts; providing for an investigation by a commission of the various organizations and institutions bearing on health.

Dr. Warner believes that it is high time that hospitals as medical institutions acquire a definite policy toward health insurance.

Tuesday afternoon was devoted to round-table discussions under the chairmanship of Sister M. Genevieve, reverend mother St. Elizabeth's Hospital, Youngstown, and Mr. F. E. Chapman, superintendent of Mount Sinai Hospital, Cleveland, respectively.

## The Hospital Feeding Problem

Miss Marguerite Hawks, head dietitian of the U. S. Army base hospital at Camp Sherman, described the methods used in feeding 1,600 men there. The food is distributed by trucks, each carrying six food boxes made on the principle of the steam cooker, in which the food containers are placed surrounded by boiling water. In the mess hall, cafeteria service is employed, except for those crippled patients, who, though able to come to mess hall, are unable to stand in line or to wait on themselves. These men are allowed to come to mess ten minutes before the line for the cafeteria service forms and are waited on at table. The raw food cost is 50 cents per day per patient for the regular diet and 58 cents for the special.

Mr. Chapman asked how many superintendents actually know what their food cost is.

Dr. Warner remarked that the general practice is to

reckon the raw food costs apart from the cost of service. He is convinced that this is correct because it furnishes the only feasible basis for standardizing food costs, inasmuch as the service varies greatly in different hospitals.

Sister Genevieve remarked that there was much more trouble in satisfying the patient than in figuring costs. At home the patient is waited on and catered to by her family and friends without cost. In the hospital she has to pay for a standardized service, which at \$1.50 to \$3.50 a day does not include special dainties or the consultation of her taste.

Mr. Chapman asked how many dietitians were consulted by their superintendents in regard to the buying of food stuffs. The discussion revolved about the question whether or not the dietitian should do the buying.

Miss Deaver, the dietitian of Mount Sinai Hospital, does not believe that any man or woman on earth, not actually concerned in the dietetic work, is competent to buy for the dietitian. She was ready to fight for this principle.

Mr. Chapman would not let Miss Deaver "get by" with that. He does not believe that a dietitian's training qualifies her for buying, and, furthermore, he believes it a wrong principle that the consumer should have anything to do with the buying. He believes that the dietitian's specifications in regard to the kind and quality of food that she desires should be followed absolutely, but that the buying should be in other hands.

Dr. Warner of Lakeside believes absolutely in the independence of the dietetic department and in the kitchens and cooks being under the dietitian. The purchases should conform to the dietitian's requirements, but she is not the proper purchasing agent.

Miss Parker, dietitian of Christ Hospital, Cincinnati, and Dr. Crew, superintendent of Miami Valley General Hospital, both believe that a competent dietitian is the proper and satisfactory person to purchase foods.

Dr. Warner believes that it depends on the institution. In a comparatively small hospital the dietitian may be the person best qualified to do the buying. This, however, does not alter the principle that the consumer should not be the purchaser. Lakeside Hospital has had all power to make purchases taken away not only from the department heads, but also from the superintendent, and Dr. Warner is convinced by the reaction on the salesmen that it is a wise provision.

Food costs were given by various persons in the audience as 49 cents a day and 15½, 20 and 18 cents a meal.

#### Hospital Building

Mr. Chapman remarked that most hospitals, like Topsy, "just growed" without definite planning or correlation to needs. He cited the case of a 225-bed maternity hospital in a community in which there are not 225 new babies to be taken care of, and which, by the terms of the bequest under which it was built, can never be used for any other purpose.

Miss M. A. Lawson, superintendent of Akron City Hospital, which was originally built as a complete and self-contained unit, gave her experience. When the needs of the city outgrew the institution, the trustees dreamed a beautiful dream and proceeded to build the end of the dream first. The result is a new unit full of defects in detail and in plan. In a new unit of 130 beds, no provision whatever has been made for storage.

On the other hand, the Sisters of Mercy at Pittsburgh gave three years to the formulation of their needs before they began to build or even to have an architect prepare plans. The result is a hospital which almost perfectly meets the needs of the people who work in it. Dr. Warner said that at Lakeside they had studied their needs for five years and had not yet called in architects to draw the plans for the new buildings. They had called in a man who knows something of hospital building. In his opinion, the man who plans the hospital must know more about its operation than the man who runs it, and much about many other things which the hospital administrator does not need to know about.

Views on the question of hospital flooring were next called for.

Mr. Owsley is in favor of clear hard maple floors in private rooms and wards. Linoleum on a cement base, shellacked and waxed, makes a beautiful floor in his opinion.

Sister Genevieve remarked that shellac will not stand washing and that cork and linoleum are destroyed by the strong cleaning powders which must be used in wards.

Mr. Chapman's preference is for wood or linoleum in wards and private rooms, hexagonal tile in diet kitchens, Corry tile in main kitchens, and cement in service rooms. He has had little experience with cork, but finds it good in elevators.

Miss Lawson found that interlocking rubber tile gave most satisfactory service in wards and corridors for fifteen years. The cost fifteen years ago was \$1 a square foot; it is much higher now and the expense, in Mr. Chapman's opinion, would now be prohibitive.

Dr. Crew found that cork with all pores filled with paint, gave satisfactory service. He likes oak floors in wards and private rooms. The hospital, he says, is now catering not to the homeless but to people of means, and must introduce something like hotel service. Mr. Chapman remarked that no white furniture is used in the private rooms of Mount Sinai.

Wednesday morning was devoted to a discussion of laundry and general administrative problems.

#### Modern Laundry Methods

Mr. Norman C. Collacott, manager of a Cleveland commercial laundry, advises that in planning a laundry, a hospital should first secure its equipment and then build around it. To leave the plan to the architect may mean continual unnecessary expense for steam and labor. The ceiling should be 15 feet high; the walls, white enamel and kept clean. The windows and fans should be so ar-

ranged that the air is changed every three minutes. If the floors are concrete, felt mats should be provided for the laundry workers to stand on. Alternating current should be used if possible. A water-softener will pay for itself in a comparatively short time, as it eliminates the necessity for bleach.

The washing machine should be as large as possible; 42 by 84 is a good size. One small machine is advisable for stockings. Hot water should be abundant. Facilities for discharge should be ample—one cannot get rid of the waste too quickly.

Equipment should be over capacity, for it is better that a machine should be idle for a short time than that the workers should be idle for lack of machines. The hot water should be 180 degrees and the steam pressure 100 pounds.

The welfare of workers is an important consideration. A hot lunch at noon is a paying investment. No employer can do too much for the welfare of his employees. It is well not to leave this matter to the head of the laundry, but for the head of the hospital himself to keep the office door always open to employees.

The establishment of the Cleveland Hospital Council suggested to Mr. Collacott that it might be well to have in each large city an expert laundry consultant. He questions if 10 per cent of hospital laundries operate within 50 per cent of their efficiency.

Mr. Collacott's paper was followed by round tables under the chairmanship of Dr. Bachmeyer of Cincinnati.

#### Round Tables on General Administrative Problems

It seemed to be the general experience that hospital laundries are badly conducted by people with an understanding of an ideal laundry system. Mr. Chapman believes that the trouble is not so much in the laundry itself as in the fact that it is connected with the hospital. The control of linen may be perfect in the laundry but it cannot be controlled in the wards. "There ain't no such animal as an efficient hospital laundry."

Dr. Warner, called on for his experience in the conservation of gauze, said that Lakeside had been washing gauze for eight years with excellent results. Gauze purchases have come down from 56,000, 50,000, and 25,000 yards a year to 18,500. The use of gauze in the hospital amounts to 500,000 yards a year. It is necessary to buy a better quality of gauze and to use made dressings



Ohio Hospital Association in convention in the Hotel Statler, Cleveland.

in order to stand washing. The expense of washing is small in comparison with the cost of gauze. The soiled gauze is put into bags and is first washed and then sterilized in the autoclave before being touched. The method of checking sterilization, described in Dr. Warner's article in the May issue of THE MODERN HOSPITAL (p. 367),

insures that no unsterilized gauze be used.

Mr. C. B. Hildreth of St. Luke's Hospital, Cleveland, discussing the out-patient department, emphasized the importance of the admitting clerk, the social service worker, and the nurse. To meet the needs of the patient, generally of the working class, evening venereal disease The venereal clinic is often clinics are most convenient. a practically self-sustaining pay clinic. Owing to the state compensation law and the industrial insurance carried by plants not protected by state insurance, the accident and emergency departments for dispensaries located in factory districts can be made a source of considerable revenue in the state of Ohio if properly organized. St. Luke's Hospital last year cared for nearly 4,000 accident As the hospital collects for the anesthetics, dressings, and x-rays, the department showed profit at the close of the year, although a paid staff of workers was em-

Dr. Warner said that hospital accounting systems consist of two parts. The first part, which is merely keeping track of the money received and paid out, is a simple matter of bookkeeping. The second, which is the use of these figures to gain information, is a more difficult matter. Accounting costs money, and if the information gained thereby is not used, the money is wasted. One important feature of hospital accounting which should be standardized is the method of classifying patients. Patients should be classified as pay, part-pay, and free pa-

tients.

The afternoon session was devoted to a report by Rev. A. G. Lohmann, superintendent of the German Deaconess Hospital, Cincinnati, on Ohio legislation bearing on hospitals, and to a discussion of hospital standardization.

# What is Hospital Standardization?

Mr. John G. Bowman, director of the American College of Surgeons, gave the answer as: "Thinking alike on a few fundamental factors in the right care of patients." These fundamentals include staff organization for the purpose, proper records, and adequate laboratory facilities and their use. The public is coming to demand these fundamentals. A demand for the use of the operatingroom at 11 a. m. today, in a case not one of urgency, should be denied if the surgeon can not produce adequate records; and a surgeon who carries off the gross specimen after operation, instead of sending it to the laboratory to be examined, should be denied the use of the hospital unless he can explain his action satisfactorily.

#### The Problems of Standardization and How to Meet Them

Mr. F. E. Chapman, superintendent of Mount Sinai Hospital, Cleveland, believes that the most important factor in the standardization of a hospital is the establishment of a morale in the personnel that will make improvement possible. One way of accomplishing this is by calling together the medical men working in the institution, "selling" them the idea or the ideal and inducing them to organize for efficiency by appointing a representative group to draw up rules and establish technique. This does not imply a closed-staff organization.

The problems which must be solved before the medical work of the hospital can be made efficient include the selection, based on analysis of their end-results, of com-

petent medical men to practice in it, which necessitates the keeping of proper case records, which involves the provision of adequate means for making such records. Although it is difficult to imagine a factory doing a business of over ten thousand dollars a year without paper records, scarcely 25 per cent of the hospitals of the country maintain medical records worthy of the name. The solution of the record problem in large institutions well provided with interns, medical stenographers, etc., is easy, given the will to do it. The problem is difficult in small institutions which are unable to secure interns. Here it may be solved by the employment of a trained hospital worker (preferably a nurse) to take the initial history, accompany the physician on his rounds, and transcribe in detail the physical findings. If the hospital is too small to require all her time for this work, the rest of her time can be employed in the laboratories.

Efficient records include, as a minimum: (1) complaint, in patient's own words; (2) family history; (3) personal history in detail; (4) physical examination in detail; (5) detailed operating room notes; (6) detailed progress notes; (7) detailed x-ray findings; (8) bedside and nurs-

ing notes; (9) discharge notes and diagnosis.

Recent medical progress has been so rapid that it has been very hard for hospitals, particularly the smaller ones, to keep up with the times. In large hospitals the volume of work justifies the employment of a competent laboratory man, but such a man would not be attracted to a small institution. Such a hospital must make arrangements with a hospital in a nearby center. The expense is no reason for failure to provide laboratory facilities, for they are just as necessary as operating-room facilities. To provide the means, it is suggested that the per capita expense of laboratory service be estimated and assessed on every patient, with an explanation. This will remove the temptation, present where a special charge is made, to neglect laboratory examinations in doubtful cases in which the patient is not well able to pay.

The hospital will be doing a public service in encouraging local practitioners to make use of its x-ray facilities, first establishing beyond a question that the patient will be treated as a consultation case only, and returned to the individual referring him for treatment.

# Better Health Through Better Hospitals

Rev. Charles B. Moulinier, president of the Catholic Hospital Association and regent of Marquette University, said that, much as he loved the medical profession, with which he had been intimately associated for the past five or six years, he believed that the individualism of the medical man was the most serious obstacle to reforms necessary for the good of the patient. Instead of medical men standardizing hospitals, it was for the hospitals to standardize the medical men.

The Wednesday evening session was devoted to talks by Dr. John A. Hornsby, hospital and health consultant, Washington, Father Moulinier, regent of Marquette University, Milwaukee, and Mr. John G. Bowman, director of the American College of Surgeons.

#### War Hospitalization

Dr. Hornsby said that the war had initiated a new epoch of hospitalization and health. Some things done during the construction of war hospitals were so good as to serve as models and others so bad as to be horrible examples. He told of the erection of a ward for thirty-five beds at Fox Hills, Manhattan Island; the grass was growing on the site in the morning when the workmen arrived. By night the building was up, plumbing and

electric wires in place and patients in their beds. On the other hand, more money had been spent in the construction of flimsy shacks than would have sufficed for the erection of steel and concrete buildings. Illustrating the wide range of construction type, he mentioned the erection of one-bed wards for contagious cases and 150bed wards in the debarkation hospitals, which served merely as distributing centers. The purpose makes all the difference in the world in the acceptability of plans.

#### The Right to Health in Ohio

Dr. A. H. Freeman, state commissioner of health, who was to have spoken on this subject, being unable to be present, Father Moulinier spoke in his stead, saying that every state in the Union and every province in Canada is wrong in its legal enactments, supposed to be for the protection of the citizen's right to health. He instanced the recent Ohio legislation granting Christian Scientists, osteopaths, chiropractors, naprapaths, and others the right to practice. The blame he said rests ultimately on the past narrow-mindedness of the medical profession. There is a grain of truth in each of these fads and sects and this grain of truth the medical profession has in general scornfully rejected. Father Moulinier looks forward to the time when all these sectarian practitioners will work under the direction of the qualified medical man as technicians.

The Thursday morning session was devoted to a discussion of health insurance by Mr. John A. Lapp, editor of Modern Medicine, and Dr. Otto P. Geier, Cincinnati.

#### Health Insurance as a Social Policy

The trend of the times indicates with certainty that health insurance will be adopted as a social policy in this country. Physicians and hospitals should, therefore, give attention to the organization so that the proper plans for medical service shall not be overlooked.

Sickness is a tremendous burden upon the people as a whole and it falls with crushing force upon those who happen to be sick. If sickness were evenly distributed, there would be no need of health insurance. Each person could stand the nine days of sickness which is the average for all people, but sickness falls unevenly. Twenty per cent of the workers suffer a disabling sickness each year lasting more than seven days. That means in about 400,000 workers, 65 per cent of those, or 260,000, are sick for less than thirty days; 19.7 per cent are sick from four to eight weeks; 6 per cent, or 24,000, are sick from eight to twelve weeks; 3 per cent, or 12,000, are sick for more than six months; while 1.3 per cent, or 5,200, are sick for more than a year.

These figures indicate the need of insurance. The worker who suffers more than four weeks of sickness is bound to be economically handicapped and large numbers are bound to be overwhelmed. Dependency and destitution follow with absolute certainty. Insurance would distribute the risk by the creation of the fund through payments by employer and employee, from which a part of the losses of wages would be paid and the entire medical care provided.

Health insurance is simply the creation of a human depreciation fund in the same manner as business now provides a depreciation fund for material things of the plant.

# Prevention of Diseases Versus Compulsory Sickness ' Insurance

Dr. Geier being unable to be present, his paper on this subject was read in his absence. He has no patience with the present program of health insurance. This program

is inadequate in that it does not cover the unemployed, the unemployable, and the defectives. An adequate wage, made possible by increased productivity, insured by a comprehensive health program, in his opinion is the best protection against sickness. He believes that health insurance administered by the state must necessarily be wasteful because governed by political considerations and that the medical and surgical service given tends to be inferior in quality.

### The Rights of Hospitals and of Osteopaths Under Recent Ohio Legislation

The question of the right of an osteopath to demand the privilege of practicing in hospitals under recent legislation came up for discussion. The last session of the Ohio legislature gave osteopaths the right to practice surgery after passing examination on the subject before the state medical board. Dr. Warner, president of the association, called attention to the facts that, in the first place, no osteopath had the right to practice surgery until such examination had been passed, and, in the second place. that any hospital not controlled by the state or municipality had the absolute right to refuse even a properly qualified practitioner the privilege of practicing in the institution, hence it was under no obligation to receive a practitioner whom it deemed unqualified. In state or municipal hospitals, the patient comes under the control of the hospital staff, and thus the question of practice by an osteopath would not arise.

#### **Election of Officers**

The officers elected are: president, Rev. M. F. Griffin of St. Elizabeth's Hospital, Youngstown; first vice-president, Mr. F. E. Chapman, superintendent of Mount Sinai Hospital, Cleveland; second vice-president, Miss Alice Thatcher, superintendent Christ Hospital, Cincinnati; third vice-president, Miss Mary Jamieson, superintendent Grant Hospital, Columbus; secretary and treasurer, Dr. E. R. Crew, superintendent of Miami Valley Hospital Dayton; executive committee, Dr. A. R. Warner, Mr. P. W. Behrens, Mr. F. E. Chapman, Miss Marie A. Lawson, Dr. A. C. Bachmeyer. The time and place of the next meeting were left to the executive committee.

After the banquet in the evening, the speeches were, as Dr. Warner said, inspirational rather than informational. Father Moulinier spoke on "The Hospital From the Point of View of the Patient," emphasizing the need for recognition of the spiritual side. Dr. Hornsby traced the influence on hospitals and health of the Crimean War, our own Civil War, the Russo-Japanese War, and the Great War just closed. This war has shown that the medical man is necessary in the army, not merely to take care of the sick, but also to keep the well man effective, and that the same things that have been done for the health of the men of the army ought to be done for the community at large.

# OKLAHOMA FORMS STATE HOSPITAL ASSOCIATION

# Officers Elected and Constitution Drawn Up in Representative Meeting in Muskogee

A meeting for the purpose of perfecting a state organization of hospitals was held in the Hotel Severs, Muskogee, May 21. Dr. Fred S. Clinton, president of the Oklahoma Hospital, Tulsa, gave a luncheon at twelve o'clock, at which representatives from all the leading hospitals of the state were present, and a program was discussed which included the following topics:

The Object of the Meeting, Dr. Fred S. Clinton; What Is Hospital Standardization? Dr. F. K. Camp, Wesley Hospital, Oklahoma City; Minimum Requirements of Case Records, Dr. LeRoy Long, University Hospital, Oklahoma City; The Hospital as a Health Center, Dr. J. A. Hatchett, El Reno Sanitarium, El Reno; The Doctor's Part, Dr. V. Berry, Okmulgee Hospital, Okmulgee; The Hospital's Part, Dr. A. S. Risser, Blackwell Hospital, Blackwell; The Minimum Laboratory Requirements of a General Hospital, and its Equipment and Management, Dr. M. Smith, St. Anthony's Hospital, Oklahoma City; Let's Go, Dr. Sessler Hoss, M. V. R. R. and P. & S. Hospital, Muskogee.

After a short discussion of these topics, the organization was formed and the following officers elected:

President, Dr. Fred S. Clinton; first vice-president, Dr. J. A. Hatchett; second vice-president, Dr. A. J. Risser; executive secretary, Mr. Paul H. Fessler, superintendent University Hospital, Oklahoma City; treasurer, Dr. Sessler Hoss; delegate to the American Hospital Association, Mr. Paul H. Fesler; alternate delegate, Dr. F. K. Camp.

# \* \* \* \* INTER-ALLIED RED CROSS CONFERENCE AT CANNES

### Public Health and Sanitation To Be Future Work of Red Cross—Congress To Meet Thirty Days After Peace is Signed

Fifteen of America's leading health specialists, acting with the distinguished physicians and scientists of England, France, Japan, and Italy, have affixed their names to a resolution of great import to the future welfare of mankind just adopted by the Inter-Allied Red Cross Conference in session at Cannes, France. The resolution was adopted by the committee of Red Cross leaders which is preparing the program to be submitted to the congress of Red Cross societies at Geneva thirty days after peace has been declared. The text resolution recommends a Red Cross program in the following words:

"We have carefully considered the general purposes of the committee of Red Cross societies whereby it is proposed to utilize a central organization which shall stimulate and coordinate the voluntary efforts of the peoples of the world through their respective Red Cross societies; which shall assist in promoting the development of sound measures for public health and sanitation, the welfare of children and mothers, the education and training of nurses, the control of tuberculosis, venereal diseases, malaria, and other infectious and preventable diseases, and which shall endeavor to spread the light of science and the warmth of human sympathy into every corner of the world, and shall invoke in behalf of the broadest humanity not alone the results of science but the daily efforts of men and women of every country, every religion and every race.

"We believe that the plans now being developed should at the earliest practical moment be put into effect and placed at the disposal of the world. In no way can this be done so effectively as through the agency of the Red Cross, hitherto largely representing a movement for ameliorating the conditions of war but now surrounded by a new sentiment and the wide support and confidence of the peoples of the world and equipping it to promote effective measures for human betterment under conditions of

peace."

The following are the American scientists who have subscribed their names to the resolution: Dr. William Welch, Dr. William Palmer Lucas, Lieut.-Col. William F. Snow, Dr. Hugh S. Cumming, Dr. Samuel McClintock Hamill, Dr. Herman Michael Biggs, Dr. Fritz B. Talbot, Colonel Richard P. Strong, Dr. L. Emmett Holt, Dr. Wycliffe Rose, Dr. Frederick F. Russell, Dr. Edward R. Baldwin, Dr. Livingston Farrand, Lieut.-Col. Linsley R. Williams, and Dr. Albert H. Garvin.

# BRITISH COLUMBIA HOSPITAL ASSOCIATION CONVENTION

# Active and Growing Organization of the West Looks Forward to Big Meeting in July—Important Questions on the Hospital Policy of British Columbia to Be Considered

This convention, according to the president of the association, promises to be the best ever in that part of the country. It will take place in Victoria, B. C., July 8, 9, and 10. Many vital questions will come up and the entire hospital policy of British Columbia may possibly be altered or materially affected by the papers which will be given at this meeting and the discussions which will follow. A large commercial exhibit is planned. The program, as tentatively arranged, is as follows:

The opening session will include an opening address by the Lieutenant-Governor-in-Council; addresses of welcome by prominent men of the province; and an address by Dr. M. T. MacEachern, president of the association.

The afternoon session will consist of an address on "Infectious Hospitals for our Province," by Dr. H. E. Young, secretary of the provincial board of health, and discussion by the medical health officers of Vancouver, Victoria, and New Westminster. The following sessions will take up "Provincial Public Health Service," (address by Dr. R. H. Mullin, director of laboratories, Vancouver General Hospital, and Dr. H. E. Young, secretary of the provincial board of health); "The Standardization of Training Schools for Nurses in British Columbia," (address by Miss Helen Randall, president of the B. C. Nurses' Association and editor of the Canadian Nurse, and Miss J. F. Mac-Kenzie, superintendent of Nurses' Provincial Jubilee Hospital, Victoria); "A New Basis for Financing Hospitals in British Columbia," (address by Mr. J. J. Banfield, member of the board of directors of Vancouver General Hospital, and Mr. R. S. Day, member of the board of directors of the Provincial Royal Jubilee Hospital); and "Case Records in British Columbia Hospitals," (address by Dr. T. R. Ponton, director of medical records, Vancouver General Hospital).

## INDUSTRIAL PHYSICIANS AND SURGEONS MEET

# Program at Atlantic City, June 9, Includes Long List of Papers by Men Experienced in This Field

The meeting of the American Association of Industrial Physicians and Surgeons will be held at the Breakers Hotel, Atlantic City, June 9. According to its program this one-day meeting will be crammed with material of interest. The morning session is to be devoted to business matters and the president's address on New Developments in Industrial Medicine and Surgery.

At the afternoon session the following papers will be

read, followed by discussion:

"Syphilis—An Inestimable Factor in Industrial Inefficiency," by Capt. E. A. Oliver, M.C., U.S.A., formerly physician to Sears, Roebuck & Co.; "Is War-Time Surgery Applicable to Industrial Surgery"? by John Moorhead, M.D., Surgeon of Interboro Rapid Transit Company of New York; "Strain of Back—An Accident or Disease," by Lieut.-Col. R. B. Osgood, M.C., U.S.A.; "Conservation of the Vision of the Industrial Worker," by W. W. Blair, M.D.; "National Program for Industrial Hygiene and Medicine," by Col. A. J. Lanza, U. S. Public Health Service; "The Importance of the Diagnostic Clinic to the Industrial Physician," by Alfred Stengel, M.D., professor of medicine at the University of Pennsylvania.

# HOSPITAL STANDARDIZATION SUBJECT OF CONFERENCE

## Catholic Hospital Association of the United States and Canada Meets in Chicago—Make Your Reservations Early

The fourth annual convention of the Catholic Hospital Association of the United States and Canada will be held June 25, 26, and 27, in the hall of St. Francis Xavier's Academy, 4928 Cottage Grove Avenue, Chicago. The main subject of this meeting will be the work which has thus far been accomplished in the standardization of hospitals

Besides this there will be papers and discussions dealing with the questions and difficulties concerning which a questionnaire was sent out by the association. Conferences of the heads of the various departments of the hospital will be conducted, and this beneficial work will be organized so as to assure the best results. Because of recent events that have taken place in regard to hospital standardization, this convention promises to be the most important one in the history of the association. The executive board requests all sisters who are unable to arrange for board and lodging at the convention to write to Reverend P. J. Mahan, S.J., 706 South Lincoln Street, Chicago, for such accommodations. Father Mahan is chairman of the committee appointed for this purpose. Applications for board and lodging should be made on or before June 10.

# NATIONAL LEAGUE OF NURSING EDUCATION MEETS IN CHICAGO

# War Work for Nurses, Shorter Hours for Nurses, Teaching in Training Schools to Be Discussed

The National League of Nursing Education will hold their annual meeting from June 24 to June 28, 1919, inclusive, in Congress Hotel, Chicago.

June 24 has been set aside for executive and committee meetings, including a special meeting of the advisory council which is made up of the board of directors of the National League of Nursing and the presidents of all state leagues. The regular business meetings will begin on Wednesday, June 25, and will include reports of committees of the league and discussions of ways and means for carrying on the work of nursing education. At 8 p. m. the first public meeting will be held, the topic for discussion being "The War Service of Nurses." Addresses will be given by the superintendent of the Army Nurse Corps, the superintendent of the Navy Nurse Corps, the dean of the Army School of Nursing, the director of the nursing bureau of the American Red Cross, and a representative of the Civil Hospital Training School.

On June 26, a session will be devoted to "What the War Has Taught Us About Nursing and Nursing Education." It is expected that several returned nurses from overseas duty will tell about their experiences. Other addresses will be given on "The Work in Camp Hospitals," "Recruiting for the Student Nurse Reserve," and "The New Bureau of Information Concerning Nurses and Nursing Work," now conducted in New York City.

A session will be devoted to the study of the means for preparing a larger number of well-trained public health nurses, and a public meeting will be held on education at which prominent representatives from the department of general education, of public health and of nursing education will speak.

At two sessions devoted to the question of improving

teaching in training schools reports of experiments along special lines will be given by experts who have made the investigations. These sessions will be followed by round tables for both training school superintendents and instructors.

A special evening session will be devoted to the study of hours of work, at which the relation of hours of work to health and efficiency, and the need for shorter hours in nursing schools will be the main topics.

At the closing session a summary of the work done during the convention will be made and the program of policies for the coming year will be considered.

During the convention time will be arranged for special groups of workers to convene for discussion of topics relative to their work.

As suggested by the joint board of directors of the three national organizations, a meeting of the state boards of nurse examiners will be called in special session to discuss problems of legislation and other matters relative to their work.

The chairman of the arrangements committee is Miss Bena Henderson, Children's Memorial Hospital, Chicago.

#### NURSING EDUCATION IN CANADA

### Canadian Association of Nursing Education Holds Annual Meeting in Vancouver—Special Attention Paid to Question of Securing Suitable Applicants for Nursing

The annual meeting of the Canadian Association of Nursing Education will be held in Vancouver June 30, and July 1-2. Among the subjects fixed for discussion will be the eight-hour day for student nurses in training schools, a minimum standard curriculum, how the association can be of real help in assisting the schools which experience a shortage of suitable applicants, and the final report on affiliations of general hospitals with neighboring sanatoriums for the purpose of providing experience in the modern care and treatment of the tuberculous.

# \* \* \* \* MICHIGAN NURSES MEET

# State Association Considers Important Questions of the Day—Rural Nursing, Industrial Nursing, and the Length of Training School Courses Among the Most Important

The annual meeting of the Michigan State Nurses' Association was held in Battle Creek April 28, 29, and 30, 1919. The first day was devoted to the business session and an informal reception at the Sanitarium Chapel by the Sanitarium Nurses' Alumnae Association; the first evening to a series of lectures on reconstruction and an illustrated lecture.

The day of April 29 was given up to the round-table discussions. These were given under the headings, public health nursing, tuberculosis nursing, rural nursing, industrial nursing, general visiting nursing, infant welfare, school nursing, Red Cross public health nursing, training of nurses' aids, the length of time spent in the training schools, and the personality of the public health nurse. The discussion of rural nursing included consideration of infant welfare work in rural communities, the problems presented by rural school children, mothers' meetings in rural communities, tuberculosis as found in the rural school, and the problems of the county school nurse. Under tuberculosis nursing were considered the nurse's responsibility to the patient and his family, to the com-

munity, to herself, and to the organization which employed her. These are, of course, only a few of the topics which were considered.

The last day, April 30, was given to the conclusion of unfinished business.

The officers elected at this convention were as follows: President, Mrs. H. Beach Morse, Bay City; first vice-president, Miss Elizabeth Parker, East Lansing; second vice-president, Miss Minnie Paynter, Calumet; recording secretary, Miss Leone Sweet, Battle Creek; corresponding secretary, Miss Anna M. Schill, Detroit; treasurer, Miss Lulu B. Durkee, Detroit; councillors, Miss Lystra E. Gretter, Detroit, and Miss Ida M. Barrett, Grand Rapids.

#### INSTITUTION ADMINISTRATION

# Round-Table Discussion at Teachers College, April 4 and 5—Special Types of Administrative Work

A round table on institution administration, arranged by Miss Emma Gunther, at Teachers College, Columbia University, New York, April 4 and 5, a large number of people interested in different phases of administrative work in institutions in the East. The varied types of work represented by those in attendance was a revelation to many interested in this field of home economics. It was not the usual formal conference; instead short reports were presented, as shown on the program given below. All the meetings were marked by a very keen interest and enthusiasm. A most helpful and interesting feature of the round table was the opportunity which it afforded for the meeting of workers in the various fields and for the exchange of experience.

A number of colleges, offering courses in institution management, were represented. These included Pratt Institute, Simmons College, Cornell University, University of Wisconsin, Battle Creek, and the University of Chicago. Many colleges are responding to the demand for training in institution management, and are asking for instructors and organizers of such departments.

At the opening meeting, Dr. Bigelow extended a cordial welcome on behalf of Teachers College. In the evening, Professor Nutting brought a message of inspiration to all workers, pointing out that the activities in these institutions lay at the very root of human needs and that all should appreciate and understand the big essential things for which this work was created.

The meeting of Friday afternoon under Miss Helen Hollister of Pratt Institute, Brooklyn, as chairman, was devoted to fifteen-minute talks on special types of administrative work, including the following subjects: "Cafeteria Management and Welfare Work for Employees," by Mrs. Marion Shafer, National Bank of Commerce, New York City; "What the Management of a Woman's Club Involves," by Miss Ayer, New Century Club, Philadelphia, and Miss Mildred Barber, Woman's City Club. Boston; "Developments in School Lunch Work," by Miss Daisy Treen, director of high school lunches, Boston; "A Community Club," by Miss Cornelia Marshall, president of Girls' Community Club House, New York City: "Problems of Y. W. C. A. Cafeterias," by Miss Emma Schooley, Y. W. C. A., New York City, and Miss Penrose, Y. W. C. A., New York City; "New Developments in My Work as a Hospital Dietitian," by Miss Charlotte Addison, Post-Graduate Hospital, New York City; "A Problem in Accounting," by Miss Delia Johnson, instructor in institution accounts, Teachers College; "Business of a Tea Room," by Miss I. Freese, Colonial Tea Room, New York City; "Administration of a Food Shop," by Miss Ella

Emerson, Food Shop, Woman's Educational and Industrial Union, Boston; "Dormitory Management," by Miss Tyler, Brooks Hall, Barnard College, New York City; and "A Field for Special Dietitians," by Miss Lulu Graves, president of American Dietetic Association, Cornell University, Ithaca.

Two-minute reports were given by graduates of the institution administration departments of Pratt Institute, Drexel Institute, Simmons College, Y. W. C. A., and Teachers College.

On Friday evening under Miss Elizabeth Goodrich, of Simmons College, Boston, as chairman, twenty-minute talks were given on new phases of institution work, which included the following subjects: "My Work as an Advisor in Cafeteria Organization," by Miss Elizabeth Bohn, New York City; "The Work of a Consultant for Households and Institutions," by Mrs. Alice Dresser, household consultant, Boston; "Supervisory Work for a Dietitian," by Miss Lenna Cooper, supervising dietitian, Surgeon General's Office, Washington, D. C.; "Organizing Our Work in a Large Lunch Room," by Mrs. Melinda Manchester, Filene's Store, Boston; "Time and Motion Studies" (Lecture and Lantern Slides), by Mrs. Frank Gilbreth, author of "Scientific Management," Providence, R. I., and "The Use of Score Cards in Administrative Work," by Mrs. Annie Dewey, Lake Placid Club, New York, and Miss Ann Blitz, dean of William Smith College, Geneva, N. Y.

On Saturday morning a group conference met for discussion of special topics. There were presented new types of positions for institution directors, especially those of organizing departments for the teaching of institution management.

### PROGRAM ON INSTITUTIONAL ECONOMY

# Institutional Economic Section of the American Home Economic Association Meets This Year in Madison

The institution economic section of the American Home Association is devoted to the administration of the institution and the household and to education in institutional economy. The annual meetings have, with few exceptions, been held at the Lake Placid Club, Essex County, New York. War Conditions necessitated the abandonment of separate section meetings during 1916, 1917, and 1918. It has seemed advisable to hold the 1919 meeting in the Middle West. It will be held in Madison, Wis., June 9-13.

These are some of the subjects to be brought up for consideration by paper and discussion: courses of study for institutional economics (two days will be devoted to the subject); dormitory administration with emphasis on all phases of the work; cafeteria management in both the college and commercial worlds; school lunch problems; restaurant and coffee shop management; hospital administration; and new phases of institution work, such as supervising-housekeepers in wealthy homes, camp directors, etc.

The program will be conducted by administrators and teachers in colleges and schools, by dietitians, and by others actively engaged in the business world.

Space devoted to institution economics on the general program at Blue Ridge, N. C., June 23-29, will be used.

It is expected that there will be some worth-while exhibits of institutional furnishings and equipment. For complete program and particulars as to accommodations, address Miss Elsie P. Leonard, Chairman Chadbourne Hall, Madison, Wis.



Conducted by ANNIE W. GOODRICH. Dean Army School of Nursing and CAROLYN E. GRAY, R.N.

Please address items of news and inquiries regarding Department of Nursing to CAROLYN E. GRAY, R.N., Secretary of the New York Board of Nurse Examiners, 135 E. 45th St., New York City.

### POSSIBILITIES OF STANDARDIZATION IN NURSING TECHNIQUE\*

Necessity for Greater Uniformity Among the Training Schools-Dangers of Too Great Standardization-Eight Principles Upon Which Standards May Be Based

BY ISABEL M. STEWART, R.N., M.A., Assistant Professor Department of Nursing and Health, Teachers College, Columbia University, New York City

The boards of nurse examiners tell us that among the applicants coming up for their R.N. examinations in practical nursing, one will usually find that there are about as many methods of making a bed as there are schools represented. This wide variation in methods extends to practically all our nursing procedures. There might be little objection to differences in method if all methods were equally good, but among examiners and others who have had an opportunity of observing the work of nurses from many different schools, the general feeling seems to be that a good deal of our nursing practice is pretty slack and our methods very often open to question. The difficulty is that we have very little basis of judgment as to what is good or bad technique. With most of us the tradition of our school or our section of the country seems to be the determining factor, while others depend upon a nursing textbook or some prominent school as a final authority. The question is whether we can arrive at any better method of determining nursing standards and whether we can do anything more than we have been doing to improve methods of nursing in the country generally.

A standard is something which has been agreed upon as a model or type, something which can be generally accepted as a basis of comparison or unit of reference. The old way of arriving at a standard was through the process of trial and error. Once the standard was accepted, there was very little chance of its changing much so long as it worked tolerably well. A rather new conception of standardization has come into use recently. Under the system of scientific management, a standard represents something which has been arrived at through exhaustive inquiry, minute tests, and accurate measurements. In determining the relative efficiency of a number of different methods, the decision would be based, not on the opinion of even the most expert, or on a majority vote, but on the results of actual scientific investigations, so far as these could be applied.

There has been a great deal of scepticism among practical people regarding the value of all these new efficiency

methods-indeed the very word "efficiency" has become distasteful to many of us because we have been so appalled by the results which have been brought upon the world by the much-boasted system of German military efficiency. The war has compelled us, however, to accept a great many of the principles and methods of the efficiency experts, and this idea of standardization has pushed ahead very rapidly in the last few years. Everything has been standardized, from ships and aeroplanes to guns and gas masks. The tests have been endless and exhaustive -tests of materials and of men, psychological and physiological tests, mathematical and scientific tests. Volumes of records have been kept, and, on the basis of these, new standards have constantly been developed to replace the old. The method has been applied not only in the field of warfare and of industry, but in government, in relief

work, and even in the field of education.

The general principle of standardization is not new in hospital and nursing work. In fact, we long ago accepted the idea of standardized equipment and methods of ward procedure. The question is whether we are ready to go farther in applying the scientific or experimental method of arriving at our standards, and whether we wish to recommend that these standards will be more rigorously and systematically applied than they have been in the past. Before deciding this question we ought to consider very carefully what it would mean. In the first place, we should have to submit all our existing methods to the most careful analysis by skilled experts, whom we should probably have to train and develop especially for this work. It would mean extensive clinical observations and tests, records of costs and materials, of time studies and motion studies, tests of fatigue in workers and of therapeutic results in patients.

But can we actually measure these things, can we determine absolutely the relative value of different nursing methods? We all know that skilled nursing saves lives, that it hastens recovery, shortens the period of convalescence, reduces complications, promotes the happiness and comfort of the patient, and establishes health on a better Mortality statistics would undoubtedly tell us something about the standards of nursing in different hospitals or nursing associations; medical examination and case records would tell us something, and the testimony of patients and their friends might be well worth considering; but it is perfectly evident that, while it is easy enough to measure and record ordinary manipulations and materials, there are a great many results of nursing methods which could not be tested or measured in any very accurate way. This is no reason, however, why we should not go as far as we can, and certainly, if research and investigation are considered absolutely essential to the progress of medical science and every other branch of modern educational or scientific work, we cannot afford to neglect it as we have been doing in nursing.

What result might we hope to achieve through a more careful scientific study of our methods? In the first place we should undoubtedly eliminate some of our loose, hit-ormiss, antiquated methods of work. A great many useless elaborations would be cut out, and we would save a good deal in time, in energy, and in materials. In many technical processes, time and costs have been reduced from one-half to one-tenth of the average through careful tests and experiments. We can readily see what this would mean in a hospital where time is always at a premium and where the resources are never equal to the expenditures.

Certain other advantages are evident. A method which has been tried out according to scientific standards, would be more likely to command the confidence of nurses and

<sup>\*</sup>Read before the Annual Convention of the New York State League for Nursing Education, Rochester, N. Y., December, 1918.

hospitals generally, and this would lead to greater uniformity in technique throughout the country. In hospitals where every different doctor wants his own special method carried out, it would offer a sounder basis for decisive action than simply the majority vote of the members of the staff. In hospitals or organizations where the graduates of a great many different schools are working, each clinging loyally to the traditions and methods of her own school, it would be easier to find a basis of agreement if authoritative data could be submitted in support of one common method. It would give teachers of nursing greater confidence and their teaching would carry greater weight if they could always support their statements with evidence and not merely with opinions. I think that we would all agree that there are undoubted advantages to be gained from this kind of careful analysis and study of nursing methods and that we ought to proceed as rapidly as we can to provide for some research along these lines.

But when it comes to the question of applying these standards a good many difficulties arise. Among efficiency experts it is definitely assumed that once a standard has been decided upon, it will be adopted by every worker and followed exactly, or with the very slightest variations, until a new or better method has been discovered. Where one has material things only to consider and where the work is of a routine type, it is perfectly possible to establish fixed and definite methods of procedure, and it is quite certain that such a system does increase production and does effect a saving in time, energy, and costs. But in nursing there are very few procedures that can be carried out in any routine way. We are dealing there mainly with human beings who vary in every conceivable respect-in size, in weight, in age, in sex, in temperament, in intelligence, and in many other ways. Not only have we widely varying individuals to consider, but they are all suffering from different ailments. No two diseases can be treated in the same way, and even in the same disease no two patients present exactly the same problems. If we are going to assume that the same method will be used with all patients in all conditions, and carried out in precisely the same way, we would reject the whole idea of standardization at once, because we know that this kind of stereotyped routine is always fatal to good nursing. Certain procedures like bed-making and dusting will always tend to become more or less automatic, but even an ordinary cleansing bath cannot be given in precisely the same way to every patient. The disease, the acuteness of the condition, the age, and even the preferences or whims of patients have to be considered, if need be at the sacrifice of the usually accepted standards of efficiency. It would be quite impossible to provide for all these variations by working out different methods for each, and so we have to accept it as a general principle that every method is to be adjusted to meet the needs of each case, and that this adjustment must be left to the judgment of the doctor or the individual nurse.

Although most of the ordinary nursing situations to be met in cases of illness can be foreseen and provided for, there are always unexpected situations appearing which present unusual complications and problems. It would be practically impossible to provide a standardized solution for all of them. We have to depend on the intelligence and resourcefulness of the nurse to apply the principles which she has been taught, and if she has been accustomed only to following a well-worked-out formula which some one else has provided for her, she will be lost entirely when she faces such problems as these. Practically none of the situations which nurses have to meet

can be solved by manual dexterity alone or by any machinery which can be automatically set in motion. Many of them are psychological situations which have to be sized up with unusual insight and sagacity and which have to be handled with tact and discrimination. No one can standardize such procedures. They must be left to the wit and ingenuity and sympathy of the individual nurse, and she must be able to work the thing out for herself in so far as her responsibility extends.

Moreover, while our equipment and other resources in hospital work are usually uniform and allow us to follow a more closely standardized method of procedure, we know that these conditions do not exist as a rule outside the hospital. The nurse who is going to do her work in private homes, the Red Cross nurse who must be ready for service in times of war or national calamity, the public health nurse, the pioneer nurse, or the missionary nurse will not find her equipment ready at hand as it is in the hospital. She will often have to work with practically nothing at all and she will be expected to improvise her own equipment and work out her own method.

The question is whether we can develop this kind of resourcefulness and initiative if we insist on too great uniformity of technique during the long period of training. It is a familiar criticism of the graduates of even our best training schools, that they cannot adapt themselves readily to the conditions they find outside the hospital. No matter how perfect their work may be in the demonstration room or in the hospital ward, we could not call them well-trained or efficient nurses if they could work only under familiar conditions, with all their equipment and materials ready at hand.

There is another element which has not been sufficiently considered by the advocates of rigid uniformity, and that is the objection which many human beings have to any kind of unvarying routine. Few of us could be happy in our work if it were all cut and dried. We want to put a little of our own individuality into it, to be able to try our different ways of getting the same results, if the essential success of the procedure is not going to be endangered by our experimentation. We cannot help distrusting any system which tends to make the individual simply a cog in a huge machine. It is too much like the German type of efficiency which is said to work with absolute uniformity, with unvarying regularity, with great thoroughness and mechanical expertness, but which leaves out of consideration most of the things, human and social, which make life worth living.

There are a great many definitions of "efficiency" but it seems to me that it just means getting things done in the best possible way with the least possible expenditure of time, energy, and materials and with the greatest satisfaction to all concerned. Friction and fretting and unhappiness may cause a far greater loss of energy than a few extra physical motions. Where there is no sense of freedom, no room for self-expression in one's work, no opportunity for individual responsibility and initiative, there can be very little real joy or satisfaction. If this nation feels that it is worth while to spend millions of dollars to help in keeping up the morale of its fighting and working forces, to make them happy and satisfied, and to give them confidence and courage, may we not assume that these things are worth some consideration in every branch of the nation's work. In nursing it seems to me that it is doubly important because happiness not only makes for better work, but it is a therapeutic agent of high value, and being contagious it spreads very rapidly from nurse to patient. The conditions of nursing work

must therefore be such as to allow for the free expression of individuality, so far as possible.

The conclusion seems to be then, that while we need to study our methods much more carefully and need to work out our procedures on a scientific basis so far as possible, we do not want to insist on any rigid adherence to set forms of technique. So long as certain fundamental principles are observed, it would be an advantage rather to have at command a variety of methods, and it would always be important that we should keep our procedures flexible and should be able to adjust them readily to suit varying needs and conditions. Our standards would be used not as rules to be invariably followed but as guiding principles or standards of reference.

The chief thing is that we should all have some basis of judgment which will enable us to size up any method as good or bad, more efficient or less efficient, and that we should have principles which would guide us in establishing new methods, where the old will not work. I am going to suggest eight standards by which we may judge the value of any nursing method. Even without accurate measurements, it is still possible to reach a fairly just decision, especially if we get a number of people to evaluate the different points under discussion.

I think I should always put safety as the first standard, because, no matter how effective a method might be in other respects, if it involves serious risks of fire, or infection, or injury of any kind to the patient or those about him, it would be less desirable than other methods which would not involve these dangers. Sometimes such risks must be taken but not in ordinary cases.

The next standard for judging the value of any nursing method is that of therapeutic effect. Does the measure produce the desired results—the best results in the average case? The result desired may be reduction in temperature, or the relief of pain, or a hundred other things, some of which as I have said before, it is very difficult to measure accurately, but all of which are of primary importance.

Next comes the comfort and general happiness of the patient. Of two methods giving equally good therapeutic results, we should always choose the one which produces least pain, discomfort, embarrassment, or worry to the patient. Indeed, it may be that a less effective measure may in the end give better results because it causes less physical or mental discomfort.

Probably the next thing to consider is economy of time. In some cases, as in the operating room or emergency work, speed may be a factor of primary importance. It is always important from the standpoint of the hospital, but may be unduly emphasized in the carrying out of ordinary nursing measures. When it interferes with thoroughness or with proper consideration for the comfort and welfare of the patient, it may be a danger or handicap rather than asset.

Economy of energy or effort applies particularly to those procedures involving heavy lifting, continuous movement, or strain of any kind. Anything which makes a heavy drain on the nurse's vitality or endurance should be eliminated as far as possible, not only for the sake of the nurse herself, but because it is not possible to secure such a high percentage of efficiency under such conditions. Labor-saving devices should be used to the fullest extent, providing always that they do not interfere with the effectiveness of the treatment or the comfort of the patient.

Economy of materials and costs would be the next consideration as a rule. Other things being equal, the method which involves the least expensive materials and equipment would be the one preferred. Sometimes a method which

involves a greater initial outlay may be the cheaper when carried over a long period of time. Durability is something which must be considered here as well as in connection with the expenditure of time and effort. In business or industry the question of cost may be of primary importance, but where life or health or even the comfort of a patient are to be considered, we usually feel that it can not be allowed to take on undue importance.

Finished workmanship is an important consideration in judging nursing technique. Neatness and attractiveness of appearance, what is often called "artistic finish," is something we very much like to see, but not at the expense of more essential things. The artistic touch is shown not only in the appearance of the finished work, but in the little niceties of detail, in the deftness and dexterity with which the whole procedure is carried through, and in the evident pride which the worker takes in her art.

The final standard would be simplicity in technique. A method which is highly complicated and detailed or one which is limited in its application because of difficulties in its execution, would not usually recommend itself as practical or efficient. There is a tendency to over-elaboration of much of our technique, which is in itself a danger, even while its aim is often increased protection to the patient. Any procedure which becomes too involved and elaborate, is likely to be slipped over in the rush of a busy ward and sometimes essentials may be overlooked among non-essentials. As far as possible the materials and equipment used should be of a type easily obtained in homes as well as institutions, so that there would be little difficulty in adapting the standard hospital method to home conditions.

These standards are not all of equal value and not all of them have to be considered in every kind of nursing procedure. In practically every case, however, our heaviest values would have to be placed on the first three points—those which concern the safety, health, and comfort of the patient. Next in importance, as a rule, will be the saving of the nurse's time and strength and the protection of her health. The hospital must be considered especially in relation to the question of costs and in regard to convenience and smoothness of operation of the work as a whole. Sometimes these different interests will conflict and then it is always necessary to balance and harmonize them in order that so far as possible justice may be done to all and the purposes for which the hospital exists may be carried out as effectively as possible.

There is always some danger that we may lay too much emphasis on the purely mechanical side of any nursing operation and that we may allow ourselves to be influenced too much by simple manual dexterity, or speed or finish, and not look farther to the principles which are being carried out, and their effect on the patient. We all know that "beautiful" work is not always good work, and the nurse who has developed a high degree of manual skill only, may lack these other qualities of intelligence, resourcefulness, and initiative which we all agree are more essential to really successful nursing. After all, trained brains are more important than trained muscles, though both kinds of skill are, of course, required in a high degree in our work.

It seems to me that pupil nurses from the very beginning should be encouraged to measure their own work by some such standards as these. It would give them some ideal to work toward and would enable them to appraise their own efforts and to work definitely toward improvement. They will often be able to suggest modifications in existing methods which make for improvement,

and I believe that all such contributions should be encouraged and recognized. Physicians can give us a great deal of help in this way and patients too, if we would accept their suggestions.

Once we have worked out what we believe is a satisfactory method and submitted it to all the tests which we can set, the next thing is to put it in writing in the clearest and most concise and convenient form for constant reference. This is what the efficiency people call an instruction or plan card. There are many different types of card, but for all ordinary nursing procedure the points covered would be, first, the thing to be done and the results to be obtained; second, the materials and equipment to be used, grouped together in the most convenient way; and third, the steps to be taken in the exact order in which they are to be carried out. Sometimes drawings or photographs are used to make the directions clearer, and very often the time is given for each step in the standard operation. Copies of these cards should be found in every ward and, if possible, every student should have a multigraphed copy for her notebook. There is no reason why there should not be two or three methods outlined for the same procedure, if they are all satisfactory methods. If it is decided at any time to make a change in the method, old plan cards would be withdrawn and new ones substituted. In some hospitals this method has been followed for some years. Two or three hospitals have recently published their procedures in book form, and there seems to be no reason why this should not be done by any school, so long as provision is made for frequent revision and correction. The main difficulty is that methods may become fixed, whereas the great object is to keep them flexible and up to date with the constant progress in medical science and with our own advancing knowledge.

A free exchange of the standards worked out by different schools would undoubtedly have good results. It would at least arouse discussion and would compel us to look into our own methods more deeply to find justification for them. It would be hoped that gradually some agreement might be reached among different schools regarding the more essential points, and particularly the procedures usually taught in the preparatory period. If we are going ahead, as we probably will, with the nursing preparatory courses in colleges, we will have to agree upon some system of preparatory instruction which will meet the requirements of the different schools to which the students go, or we will have to eliminate practical nursing from the program of the students altogether.

Last summer in Vassar College the teachers of nursing represented seven or eight different schools, and the students were preparing to enter thirty or more different schools. The only thing that could be done was for the teachers to meet and agree upon certain general methods which seemed to them to measure up to the standards which we have discussed here. I understand that in some cases the students had to change practically every method they had learned when they came into the hospital. This is surely not a very satisfactory or economical way of teaching practical nursing. I have no objection whatever to pupil nurses learning a number of methods of making a bed or giving a bath, but where, as in some cases, the principles conflict, it tends to produce questioning and confusion in the minds of the students, and I think it does lead to a lack of confidence in our system as a whole.

Some day soon we must work out a plan for our own experimental laboratories, where we can carry on our research work as they are doing in practically every other field of technical or scientific work. If it can be done in connection with industrial work, and in schools and col-

leges, and scientific institutions of every sort, surely it can be done in hospitals where we are already carrying on extensive research work in medicine. Not only would the patients benefit by it, but the whole institution would profit by a careful scientific study of nursing work. And last, but not least, we might find some way of lightening the heavy burdens under which our pupil nurses are laboring—which is, after all, the biggest problem of the moment in nursing work.

# \* \* \* \* RED CROSS NURSE DECORATED

#### Exceptional Heroism in Action Brings Honor Again to American Red Cross

The decoration of another American Red Cross nurse for exceptional heroism in action has been reported to national headquarters from Paris. She is Miss Jane Jeffery, of Brookline, Mass., who was awarded the Distinguished Service Cross in recognition of her courageous conduct during the German air raid on the American Red Cross hospital at Jouy-sur-Molin last July. At that time Miss Jeffery although badly wounded herself attempted to continue her duties. Her citation reads:

"For extraordinary heroism in action at Jouy-sur-Molin (Seine-et-Marne), France, on July 15, 1918. While she was on duty at American Red Cross hospital No. 107, Miss Jeffery was severely wounded by an exploding bomb during an air raid. She showed utter disregard for her own safety by refusing to leave her post, though suffering great pain from her wounds. Her courageous attitude and devotion to the task of helping others was inspiring to all her associates."

Miss Jeffery has served in France since October, 1917, and until June last was stationed at the Red Cross repatriation depot at Evian. Then, during the Marne battle, she was transferred at her own request to Jouy.

# \* \* \* \* STANDARD RATES FOR CALIFORNIA NURSES

## State Nurses' Association Adopts Salary Schedule Based on Reasonable Charges Under Present Conditions

As a result of numerous complaints that nurses in the state of California were charging exorbitant prices for their services, the State Nurses' Association has adopted the following schedule as being reasonable, under existing conditions, for trained nurses:

General nursing (men, women, and children), for less than one week, a fraction of a day or odd days over a week: \$5 a day, or \$30 a week.

Contagious and infectious cases specified as scarlet fever, diphtheria, measles, erysipelas, tuberculosis, venereal and malignant diseases, and typhoid: \$5 a day.

Typhus, bubonic plague, smallpox: \$10 a day; mental cases, \$6 a day; alcoholic cases, \$10 a day; assistant at operations, \$5 to \$10; obstetrical nursing, \$5 a day, \$30 a week while waiting.

Additional patients, each, \$10 a week, or \$2 a day; visiting nurses, \$2 an hour or less, during the day; visiting nurses, after 6:00 p. m., \$3 an hour; special treatments, including massage, nurse to make her own rate.

Traveling expenses charged on all out-of-town cases.

Montana has issued a call for more public nurses. In connection with Surgeon-General Blue's recent statement that there should be a public health service nurse at work in each county, statistics indicate that Montana lacks sufficient nurses to supply even one-third of its counties.



Conducted by BARROW B. LYONS
Superintendent Delaware Hospital Wilmington, Del.

# TWENTY SUGGESTIONS TO INDUSTRIAL PHYSICIANS AND SURGEONS

Their Field Includes Vocational Placement and Health Supervision, Both of Men and Conditions at Work and Home—Big Feature to Be Reached Through Work and Research

BY C. D. SELBY, M.D., Consulting Hygienist, U.S.P.H.S., Washington

The function of industrial hygiene and medicine is to reduce or prevent, so far as possible, the loss of time and efficiency among industrial workers from conditions that impair the functioning of the human body in its relation to work.

In seeking to gain these ends, it is necessary that industrial physicians (1) assist and advise in the selection and vocational placement of workers; (2) aid workers in the maintenance of their health and body functions and in their restoration when impairment has occurred; (3) supervise working conditions so far as they may affect health; (4) under certain circumstances, give aid in the procurement of better home and community conditions; and (5) endeavor to enhance the knowledge of industrial hygiene and medicine.

Industrial physicians would do well not to allow the urgency of surgical care in industry to detract from the importance of thoughtful attention to the related hygienic functions of medical service.

# VOCATIONAL PLACEMENT OF WORKERS

The measures necessary for physicians to assist and advise competently in the vocational placement and replacement of workers are indicated under the following headings:

#### Standardization of Occupation Requirements

At present the greatest difficulties industrial physicians have in this respect are: (1) the lack of standards as to maximum effort, average continued effort, and other conditions under which women, handicapped, and normal workers continue to labor effectively and without personal hazards; and (2) the lack of similar standards for machine operations, process work, and other occupational requirements. Investigations are being conducted to ascertain such standards but obviously a considerable time will be required for their completion.

Suggestion 1.—In the meantime it is suggested that industrial physicians familiarize themselves as thoroughly as possible with the physical and temperamental requirements of all operations, processes, and methods used in their establishments.

# Physical Examination of Industrial Workers

The purpose of the physical examination is to obtain information which will enable physicians (a) to assist and advise in the vocational placement and replacement of workers and (b) subsequently to assist and advise both employers and workers in the maintenance of the workers' health; the former in order that they will not cause the workers to labor under conditions that may be unfavorable to health, and the latter in order that they may live and labor without impairment to health. Physical examinations of employees on various occasions are essential to this purpose.

Suggestion 2.—In view of the foregoing it is suggested that industrial workers be examined physically (a) prior to employment and reemployment if the period of absence warrants; (b) upon transfer; (c) upon termination of employment if engaged in process or other hazardous work; (d) after absence due to sickness or injury not under observation; (e) upon feeling or appearing sick; (f) upon failing to measure up to requirements of production, unless the reason is evidently not physical; (g) when engaged in process or other hazardous work (monthly or more frequently if necessary); (h) when handling food supplies (sufficiently often to guard against communicable disease); and (i) when pathological conditions have been found (sufficiently often to guard against further impairment).

### Application of Standards

To examine only is not sufficient. The findings must be analyzed, and, through cooperation with employment departments and foremen, must be applied to vocational placement and subsequent physical supervision.

Suggestion 3.—It is suggested, therefore, that physicians foster a closer cooperation with employment departments and foremen in order that they may advise with and assist them in applying the information secured through examinations to the vocational placement and transfer of women, handicapped, and normal workers.

Instruction of Newly Placed and Transferred Workers

Sometimes instruction is necessary in order that workers may adapt themselves to their vocations and safeguard themselves against hazards that cannot be avoided. This applies, for example, to workers in lead, TNT, and other poisons, also to female and handicapped workers under certain conditions.

Suggestion 4.—That workers may safeguard themselves against health hazards unavoidably present in vocations to which they are assigned, it is suggested that physicians (a) familiarize themselves with the hazards of vocations, (b) prepare themselves personally to instruct employees when necessary, and (c) supply themselves with instructive pamphlets in hazardous vocations.

# HYGIENIC SUPERVISION OF WORKING CONDITIONS

Because of their knowledge of the human body, the physicians may be reasonably expected, when they assume industrial service, to have knowledge of working conditions which have unfavorable effects upon health. They may be expected also, in their capacities as industrial physicians, to exercise supervision over working conditions in order that workers may not be unnecessarily subjected to unhealthy conditions. The measures necessary for the exercise of such supervision are discussed under the following headings:

# Inspection

Obviously physicians can not supervise working conditions unless they have intimate knowledge of existing conditions in their establishments.

Suggestion 5.—In order that they may secure intimate knowledge of existing working conditions, it is suggested that industrial physicians, or their assistants, make regular tours of inspection of their establishments with the ob-

ject of obtaining information which will enable them to act intelligently in the correction of those conditions which are harmful to health, particularly with respect to (a) monotony, (b) concentration, (c) isolation, (d) speed, (e) overtime, (f) inadequate ventilation, (g) poor illumination, (h) excessive variations in temperature, (i) excessive variation in humidity, (j) harmful dusts, (k) gases, (l) fumes, (m) poisons, (n) inadequate sewage and waste disposal, (o) inadequate toilet, washing, and locker facilities, (p) unsafe drinking water, (q) workroom congestion, (r) poorly adapted workroom clothing, (s) unnecessary noises, (t) lack of mechanical safeguards if safety is not otherwise provided, and (u) workroom disorder.

#### Investigations

Certain processes, operations, and methods necessary to industry are known to be harmful to health; others are suspected of being harmful. While investigations have been made and conclusions have been reached in connection with certain of the health hazards, there are yet many opportunities for further investigations.

Suggestion 6.—For the enrichment of knowledge of health hazards of processes, operations, and methods, and the determination of means for preventing or minimizing those hazards which can not wholly be avoided, it is suggested that industrial physicians make special studies of such known and suspected hazards as may be present in their establishments. It is also suggested that those physicians who contemplate making studies of this nature communicate with the U. S. Public Health Service, the office of Industrial Hygiene and Medicine, in order that this office may avail itself of their findings and may inform them of the results of other similar investigations.

# Instruction of Foremen and Management

While production is paramount in industry, no employers wish to jeopardize unnecessarily the health of workers. If working conditions are such that harmful effects do or may result, the assumption is that the employers are not aware of them nor informed of means for their correction; these matters are left very properly to physicians and sanitarians.

Suggestion 7.—In view of the fact that the thoughts of employers are applied chiefly to the problems of production, the initiative in the correction of unfavorable conditions must necessarily rest with the physicians. It is suggested, therefore, that industrial physicians take special pains to inform employers and foremen tactfully but clearly of (a) the existence of unhealthful conditions, (b) their harmful effects, and (c) means for their correction.

### HEALTH MAINTENANCE

While it is true that unfavorable working conditions are capable of impairing the health of workers, those conditions are not alone responsible for impaired health. Much depends upon the workers themselves and the manner in which they live and sustain themselves. Although the workers are free agents and are privileged to live and sustain themselves as they see fit, physicians are able to assist them greatly through advice and service in the maintenance of health. As an aid to efficiency and production, employers realize the advantage of extending their workers assistance in this direction, particularly in so far as maintenance of health during hours of employment is concerned and, quite naturally, they look to their physicians to do this for them.

# Health Instruction

Not being specially trained in health maintenance, the

workers may be expected unknowingly to violate the rules of health.

Suggestion 8.—In order that industrial workers may not be handicapped by a lack of knowledge of the measures essential to health maintenance, it is suggested that industrial physicians endeavor through lectures, personal talks, bulletins, posters, articles in shop papers, etc., to instruct them in (a) personal hygiene, (b) proper clothing, (c) proper food, (d) recreation, (e) rest, (f) exercise, (g) prevention of transmissible diseases, (h) personal habits, etc.

Provisions and Facilities for Health Maintenance in Establishments

Instruction in the maintenance of health alone is not sufficient. Provisions must be made and facilities furnished within the establishments in order that workers may be induced and enabled to apply the principles of health maintenance during working hours. Although industrial physicians have manifested little interest in this direction, it is reasonable to believe that their knowledge is such as to qualify them to advise on, if not to supervise, all activities necessary to prevent fatigue and impairment of vitality.

Suggestion 9.—In applying their knowledge to the prevention of fatigue and the impairment of vitality among industrial workers, it is suggested that physicians direct their attentions to (a) the procurement and operation of facilities for rest, recreation, and exercise, (b) the designation of workers who should have the benefits of rest, recreation, and exercise, and (c) the conditions under which they should avail themselves of these benefits. It is further suggested that physicians interest themselves in the (d) procurement of refreshment facilities (restaurant and refreshment stations), (e) the supervision of food and milk supplies, (f) the sanitary supervision of restaurants, refreshment stations, kitchens, and storage rooms for foods, and (g) the daily inspection and monthly examination of all food handlers (for prevention of communicable diseases).

# Prevention of Transmissible Disease

The necessity of preventing, or at least controlling, transmissible disease among industrial workers is evident. The difficulty is in applying the measures necessary. Theoretically it might appear that a daily inspection of all employees by physicians or their assistants would serve to bring all transmissible disease to attention in their incipiency. However, in many establishments this is impractical.

Suggestion 10.—Where it is practical, it is suggested that all employees be inspected daily, especially in times of epidemic. If this is not practical, physicians should arrange with foremen to require all employees who have the appearance of illness, those who have eruptions in particular, and all who do not feel well to report at the dispensary for diagnosis. It is scarcely necessary to suggest further that all who are found suffering with communicable disease should be excluded and health officers notified of all reportable cases.

#### Treatment of Trivial Illness

It seems that industrial workers, as well as others, are prone to ignore or neglect non-incapacitating illness, for example, headache, colds, constipation, etc. As these are sometimes early symptoms of more serious illness, employers have found it advantageous to production, as well as beneficial to the workers, to have all these indispositions which become evident during working hours treated by their physicians.

Suggestion 11.—In the interest of efficiency and for the maintenance of health among industrial workers, it is suggested that physicians encourage workers to seek treatments for the relief of trivial illness, occurring during hours of employment, which ordinarily they would neglect.

### Prophylactic and Emergency Dental Attention

Inasmuch as neglect of teeth, which is quite prevalent, results in a variety of infections and other incapacitating diseases, employers are finding it to their advantage more and more, and to the benefit of the workers, to provide prophylactic and emergency treatment of teeth among the workers.

Suggestion 12.—In view of the fact that prophylactic dental treatments are of great educational value in the maintenance of health and are measures of known value in the prevention of certain incapacitating diseases, and in view of the additional fact that the treatment of dental emergencies—toothache, etc.—arising during working hours is useful in giving relief and enabling workers to continue employment, it is suggested that industrial physicians procure personnel and facilities for dental service, prophylactic and emergency, and seek to encourage workers to avail themselves of it.

### Surgical Treatments

The most evident reason for industrial medical service is, of course, the treatment of injuries as a function necessary to the maintenance of health, but it is necessary also to emphasize the fact that this is but one of several important functions. Its importance is determined largely by its emergency features. Measures which prevent the need of surgical treatments and also medical treatments, would seem to be equally essential and of perhaps greater importance. Also, reconstructive surgery has recently come to the attention of industrial physicians and seems to be a reasonable function in the activities necessary to the rehabilitation of injured and deformed workers.

Suggestion 13.—Industrial physicians recognize the necessity of surgical service in the treatment of injuries; it is suggested that they extend that surgical service to include, so far as possible, reconstructive measures designated to aid in the rehabilitation of injured and handicapped workers. It is suggested that physicians do not allow the urgency of surgical treatments to overshadow the purely hygienic functions of medical service, which are likewise of much importance.

#### LIVING AND COMMUNITY CONDITIONS

Employers may be exceeding their responsibilities when they endeavor to assist workers in handling difficulties which arise in their personal affairs and when they attempt to improve community conditions, yet employers have a definite interest in these matters in so far as they cause worry and impairment of vitality among workers.

#### Social Aid

The position which physicians occupy in the lives of people confers upon them, to a certain degree, the duty of advising them in the solution of problems that are more or less of personal and community relationships.

Suggestion 14.—Inasmuch as physicians occupy a position which is close to the hearts of the working people, it is suggested that they take advantage of this relationship, (a) to advise and assist workers in the adjustment of social and financial troubles, (b) to encourage thrift, domesticity, sobriety, and morality, and (c) to offer instruction in health and sanitation. In these establishments which have sociological departments, physicians

may be expected to cooperate with them in the foregoing activities.

#### Medical Aid

Sometimes workers are unable to obtain adequate medical, dental, and nursing attentions for themselves and their dependents and, although employers may not be responsible, they realize these conditions may be sources of considerable worry to the workers and therefore detrimental to production.

Suggestion 15.—Because of knowledge which physicians have of doctors, dentists and nurses, hospitals, clinics and nursing relief societies of their communities, it is suggested they endeavor to assist workers in procuring adequate service for themselves and their dependents, when workers are unable to procure it, in order that the worry incident thereto may be avoided, or reduced, at least, to the minimum. Actual nursing aid may be given advantageously for short periods, by visiting nurses of the establishments, acting under the direction of the patients' own physicians.

#### Community Aid

Through their relations with workers in connection with social and medical aid, industrial physicians frequently become aware of community conditions unfavorable to health.

Suggestion 16.—As an aid to community betterment, it is highly desirable that industrial physicians use the information they acquire of unfavorable community conditions in affecting remedial measures through cooperation with local and state authorities, and other industrial establishments.

### ENHANCEMENT OF KNOWLEDGE

Realizing that industrial hygiene and medicine is relatively new and in the developmental stages, the U. S. Public Health Service recognizes the value of cooperation with physicians of industrial establishments in order that the service may act as an agency for the collection and distribution of information intended to develop and enhance further the value and opportunities of industrial hygienic and medical service.

#### Research

Industrial physicians are in a splendid position to carry on studies of working conditions in their relation to health and of measures for their correction.

Suggestion 17.—For the purpose of furthering the development of the science of industrial hygiene and medicine and in order to contribute substantially to its development, it is suggested that, in cooperation with the U. S. Public Health Service, Division of Industrial Hygiene and Medicine, industrial physicians (a) carry on researches and (b) disseminate the information secured thereby through the medium of scientific meetings, journals, etc. In this connection, the U. S. Public Health Service is prepared to direct researches and to supply personnel to conduct them if desired.

#### Instruction of Medical Personnel of Industrial Establishments

Industrial physicians, as a rule, find their time taken up with routine work, and, as a result, they are, perhaps unconsciously, in danger of becoming restricted in breadth of knowledge and limited in scope of activities.

Suggestion 18.—For the development in knowledge and usefulness of the medical personnel of individual establishments, it is suggested that industrial physicians hold scientific meetings of their personnel, when of sufficient numbers, for study and discussion of those matters that

particularly concern the health problems of their industries. It is also suggested that they arrange conference groups for like studies.

#### PERSONNEL AND FACILITIES

Desirable though it may be to indicate specifically what personnel and what facilities are essential adequately to carry out the foregoing suggestions, to do so is quite impossible. It is assumed that industrial physicians have the knowledge necessary to put into effect the functions indicated.

Suggestion 19.—It has been observed, however, that industrial physicians very generally are handicapped by the lack of sufficient personnel and adequate quarters and equipment. It is suggested, therefore (and this is intended chiefly for employers themselves) that industrial physicians secure sufficient authority adequately to house, equip, and man their departments in order that they may be of the greatest usefulness.

If employers do not feel that they can endow their physicians with this authority, it is an indication they have selected their physicians unwisely.

OPPORTUNITIES OF INDUSTRIAL HYGIENE AND MEDICINE

The science of industrial hygiene and medicine is the science of medicine applied to industrial service. It is prolific in opportunities for usefulness in the conservation of health and limb, and through this, in the promotion of industrial efficiency and the facilitation of production.

Suggestion 20.—In view of the inestimable opportunities which industrial service offers physicians to exercise their knowledge and skill, not only in the behalf of industry, but also in the behalf of industrial workers, it is suggested that industrial physicians bring themselves to a full realization of the dignity of their profession and the value of the service they are capable of rendering. This can be done only by the concentrated application of their time and efforts in the service and a complete availment of the opportunities it offers in the prevention of illness as well as in the treatment of injuries.

# \* \* \* \* EMERGENCY INFLUENZA HOSPITAL AT WILMINGTON

Erected in Forty-Eight Hours Complete in Every Detail— Achievement of Emergency Fleet Corporation

By JOHN MICHAEL STADTER, M.D., Emergency Fleet Corporation, Wilmington, Del.

The erection of a hospital complete in every detail from foundation to equipment within forty-eight hours, is one of the many achievements of the Emergency Fleet Cor-

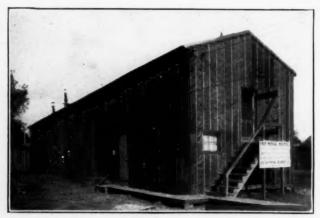


Fig. 1. Front view of the emergency hospital.



Fig. 2. Rear view of the emergency hospital, showing the diet kitchen.

poration of the United States Shipping Board. This feat was accomplished by the Emergency Fleet Corporation during the influenza epidemic at Union Park Gardens, Wilmington, Del., Lynch Construction Company, contractors, where more than five hundred dwellings were in course of erection for shippard workers.

This quick action on the part of the government in providing an emergency hospital where the men could be taken and treated as soon as symptoms of the disease appeared no doubt saved the lives of many workmen, as out of 124 cases treated there were but four deaths. This achievement, however, is only a fair example of how the Emergency Fleet Corporation looked after its men from Maine to Florida during the epidemic.

At Union Park Gardens there were employed fortythree hundred men. The physician in charge early in the epidemic saw the necessity of an emergency hospital to take care of the men working on the government project. No time was lost. The hospital was started from the foundation, completed, fully equipped, and ready to receive patients within forty-eight hours.



Fig. 3. Ward where patients were received and cases treated.

It was a one-story frame structure built to accommodate seventy-five patients; in an emergency it could be equipped with a hundred beds. Notwithstanding the way it was rushed to completion, the hospital contained every convenience for patients and attendants, and no detail was overlooked. There were shower baths, laundry, medicine closets, and a chart room. The electric lighting arrangements were excellent and plumbing met all the requirements of the city board of health and the sanitation department. The hospital was heated by wood-burning camp stoves with smoke pipes running below the ceiling.

Wind shields were provided for each window to deflect fresh air toward the ceiling, and no pains were spared to make the sanitary conditions as perfect as possible under the conditions.

The total cost of the construction and equipment of the building was \$4,060.32, divided as follows: construction, \$2,867.82; commodities, \$773.65; medical supplies, \$118.85; laundry, \$300.

The hospital staff consisted of the following members:



Fig. 4. View of convalescent ward. Here the patients were retained three days after their temperature was normal.

physician in charge, day supervising nurse, night supervising nurse, eight Red Cross helpers, two dental students acting as orderlies daily, one janitor, and one night orderly.

In the bunk houses fifteen hundred laborers and mechanics who were staying on the grounds were housed. At the start these bunk houses were inspected every morning, and any man found with influenza was sent to the hospital, and his temperature, pulse, and respiration were taken on his admission. In a majority of cases, where one man was found suffering with the disease in a bunk, the surrounding two or three bunks became infected with the malady. After these men were isolated in the hospital, we found that the infection was stopped in that area of the bunk houses; upon its appearance in other bunk houses the same course of action was repeated.

Signs were placed about the bunk houses instructing any man who felt sick to notify the physician in charge at once or to appear before him at the earliest opportunity. A tour of the bunk houses was made in the morning, and, if any man was found not inclined to work, his temperature, pulse, and respiration were taken. Sanitation and hygiene to the highest point of efficiency were carried out in the bunk houses and the commissary.



Fig. 5. Front view showing arrangement of diet kitchen.



Fig. 6. Rear view showing arrangement of diet kitchen

For the protection of the men during the epidemic, lectures were given on the sanitation of the bunk houses.

Out of fifteen hundred men occupying these bunk houses, 124 entered the emergency hospital, some of whom had a temperature on admission as high as 105 degrees. On the admission of these patients to the hospital, Treatment No. 1 was given, and Diet No. 1. After the temperature had become normal, the patients were allowed to convalesce three days in the hospital and then sent to their respective bunk houses to resume their usual diet and occupation. None returned with a recurrence.

Diet No. 1 consisted of broths and milk; Diet No. 2 consisted of soft-boiled eggs, toast, and milk.

Treatment No. 1, given immediately upon admission to the hospital, consisted of 10 grains of aspirin, 10.3 grains of quinine sulphate, compound cathartic pills, and no other medication for twelve hours. The patient was then put upon Treatment No. 2, which consisted of 5 grains of aspirin, 4 grains of quinine sulphate, 2 grains of cascara, with injections of 5 minims sero-vaccine every three days.

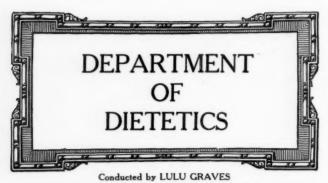
Any patient developing physical signs of pneumonia was immediately isolated in a private room. These patients were treated with sero-vaccine, and regulation pneumonia treatment followed.

A hundred twenty-four patients were admitted to the hospital during the epidemic. Two of this number died of bronchial pneumonia and two from endocarditis. Workmen applied daily at the emergency hospital dispensary for treatment. Special attention was paid to their temperature, pulse, and respiration, and, if these were found to be abnormal, the patient was immediately put to bed and a complete physical examination was made.

On an average, twenty-five patients a day applied to the dispensary for treatment, some suffering from contagious diseases, some not. Others were treated for minor conditions. The total number of patients treated at the dispensary was 168, making a total of 292 which the hospital treated.

For the protection of those in the bunk houses during this epidemic, rules were made and put into force, compelling all incoming laborers and mechanics to pass through the government inspection office upon their application for a position. These cases were thoroughly inspected, and a physical examination was made to prevent any laborer or mechanic coming from other cities from spreading the disease in Wilmington. Any men found suffering from a contagious disease were placed in the hospital and kept there until fully recovered.

Considering the low mortality, I would say that sanitation, hygiene, isolation, and early treatment are the chief factors in the successful treatment of influenza.



Please address items of news and inquiries regarding Department of Dietetics to the editor of this department, Home Economics Building, Cornell University, Ithaca, N. Y.

### THE IMPORTANCE OF FLAVOR IN FOOD

# Extracts Which Add to the Palatability of Food Have Real Dietetic Function-Especially Important to the Sick

In an attempt to strengthen the existing prohibition laws, some of the states are proposing laws so stringent as to interfere greatly with the sale of flavoring extracts. The effect on hospitals of such legislation may be similar to that of a few years ago when oleomargarin was put under the ban.

We all concede that margarin has its advantages for cooking purposes when properly used. It also serves as an inexpensive substitute for a high-priced product.

Flavoring extracts have a distinct place in preparation of food and are particularly desirable in hospitals. No one would claim for flavoring extracts a nutritive value in any way comparable to that of chocolate, caramel, fruit juices, etc., but in contributing to the palatability they have food value which should not be ignored.

What hospital, hotel, or other institution serving large numbers of people could obtain enough of these natural flavoring materials to supply its needs? The question is not of cost only, though that is no mean consideration, but of supply. It would be practically impossible for hospitals to procure sufficient amounts of these materials to meet their requirements throughout the year.

It is scarcely necessary to mention the importance of palatability and attractiveness in feeding the sick. What use would it be to make custards and desserts if these were not flavored? These are made from foods which are most desirable from the standpoint of nutrition-eggs and milk, or cream-but which have a bland flavor which makes them tasteless and unpalatable without the addition of some material for flavoring. We have innumerable instances of the food value of flavor, of foods which appeal because of their palatability. Maple syrup is considered by all of us to be far superior to other syrups, not because of greater nutritive value but because of flavor.

Flavoring extracts were included in the list of things necessary for the United States Army. The troubles of the dietitian will be multiplied if she is asked to feed patients and employees of hospitals with only natural flavors accessible. Her bills will be greatly increased, but her troubles in preparing desserts which will be eaten may be held in solution. For example, in order to hold 5 percent of lemon oil in solution, 80 percent of alcohol must be present; reducing the amount of alcohol reduces

will be even more greatly increased. As yet alcohol seems to be the only medium in which some of these volatile oils

the amount of lemon oil held in solution until, with 45 percent of alcohol, practically no oil can be present. Such an extract will give a distinct odor of lemon and if colored yellow will find a ready sale.1 Several chemical compounds have been prepared which have an odor similar to that of some fruits. Amyl acetate has an odor resembling that of banana, butyric ether that of pineapple. These, however, require the use of alcohol, but there are other mixtures of purely chemical substances which might be put upon the market and which we do not wish to use in the diet of the sick.

We are not asking that the prohibition laws be repealed to provide us with flavoring extracts, but we do hope that we shall have no legislation which will place an unnecessary burden upon the hospital.

#### A GOOD EXAMPLE

### Scientific Hospital Feeding Carries Suggestions for Every Dietitian

Concrete discussions are always interesting, and one invariably makes application of any principle or practical illustration to one's own particular sphere. Sometimes a method may be valuable from a negative standpoint, while others apply directly. Mrs. Pett, in the following article, has told us of the careful way in which the patients of Winona General Hospital are fed and the details of procedure are given in such a way as to be easily understood. While these same details may not be possible in all hospitals, the same care can and should be given to the feeding of patients in any hospital.

The nurse with sufficient knowledge to measure up to the standard Mrs. Pett has mentioned as ideal is the exception. Much is being done in the way of treating special patients by diet in the majority of our progressive hospitals. It would be interesting to know how others are meeting this problem. We hope that the good example set by Mrs. Pett will be followed as it should be, and that we may have a report from many others as to how they are treating patients by dieto-therapy with the facilities at hand. It would also be interesting to know how many hospitals have any facilities for this kind of work.

## \* \* \* \* SCIENTIFIC HOSPITAL FEEDING

Necessity of Adapting Diet to Patients' Needs and Tastes-How a Simple Chart and System of Records Makes the Work More Easy

By CLARA G. PETT, Former Dietitian Winona General Hospital, Winona, Minn.

To the trained dietitian her profession becomes not only an obsession but a delight. From the returning vigor of patients and their many expressions of appreciation, she realizes that by the application of the arts known to her craft she has helped to win many doubtful battles and that in so doing she has been richly rewarded.

I recall an exceedingly difficult diet in the long obstinate convalescence of a male patient. Eggs were most necessary, but they were very distasteful to the patient, particularly the yolk. To overcome this difficulty the whites of two eggs were served in place of a yolk; for the valuable fat and minerals were substituted cream and pureed vegetables, in this particular case spinach and carrots.

The slightest details in the preparation of this tray were religiously guarded; no lukewarm temperatures were tolerated. Hot foods were hot and cold foods were cold. The golden brown toast and the juicy scraped beef pat-

<sup>1</sup> Olsen, John C.: Pure Foods, Ginn & Co., p. 186.

ties were done to a turn, and, piping hot, they were rushed to the patient's room. Does such vigilance pay? The answer is obvious. At the end of the sixth week the patient left the hospital greatly improved. Now at the end of a year he is well and hearty.

Successful feeding in a hospital depends on the two following principles: first, the selection of foods to meet the pathological requirements of patients, which means that the foods should be properly combined with reference to values and chemical reaction in the process of digestion; that the preferences of the patients consistent with the diet prescribed should be recognized, in so far as possible; and that the psychological value of the esthetic should always be considered in the serving; secondly, patients should be served just enough to nourish them properly and no more.

The question of quantity is very important, and a unit of measurement is absolutely essential to its regulation. Research in foods has established the calorie as a unit of food measurement. Its use in hospital feeding is greatly facilitated by serving food in 100-calorie portions. Research has also established the number of calories required by persons of various ages, weights, and under various physical conditions.

In the satisfactory development of the two underlying principles indicated above, the dietitian should be ably assisted by senior nurses. High school or college graduates, familiar with the branches underlying dietetics, i. e., physiology, inorganic and organic chemistry, bacteriology and psychology, are, of course, ideal. Such nurses, supervised by the dietitian, could weigh and carefully supervise the diets of eight or ten patients each, the number of patients depending upon the nature of the diets. The responsibility for each nurse's assignment of diets should be thrown entirely upon her, and the nutritive and aesthetic values thoroughly emphasized. In hospitals of fifty or seventyfive beds, one cooking laboratory is sufficient. Adjacent to this should be a serving or tray room generously provided with cupboards and shelves, tables, gram scales for weighing, and dishes marked in grams and cubic centimeters for measuring food. A bread-cutter and a buttercutter, each adjusted to cut in 100-calorie portions, are also required.

The shelving in the tray or serving room should be divided into as many sections as there are classes of diets, i. e., liquid, soft, light, and full, and so marked. All the patients on these diets do not receive the same number of calories; among the "fulls," for instance, a certain number receive 2000, and others perhaps 2300 or 2800, as the case may be. Consequently the section marked "Fulls" is subdivided into three divisions, each one marked by a large card indicating the number of calories which that division is to receive.

Name Date Room Age Weight Diet Calories Remarks No butter James White.....Feb. 7 7 35 154 Full 2,000 Prefers milk

Tabular charts, like the one shown should be hung in the serving room for reference in the preparation of the patients' trays. The information which it calls for is supplied by the dietitian. As will be seen, the charts bear the name of each patient, date of entrance, room, age, and weight, taken if possible upon entrance, the diet prescribed by the physician—whether liquid, soft, light or full—and the number of calories required. Under "Remarks" are noted individual dietetic peculiarities as discovered by the dietitian in her daily visits to patients. This record is of great assistance in giving the personal touches so pleasing to patients.

This method of feeding may readily be adapted to the

requirements of a larger hospital by increasing the number of diet kitchens and serving facilities in proportion to the number to be served. The equipment outlined above is sufficient to care for seventy-five trays.

On a strictly liquid diet a patient receives about 5 calories per kilogram of body weight. On a soft diet 15 are given; on light, 20, and on full diet, from 25 to 30.

From these charts the patients are classified according to the number of calories required, and the trays are placed in the section and division of the tray room which is marked to correspond to the calories being given the particular patient. Two sets of menus for each type of diet, (full, light, soft, and liquid) are made out, one for the cook and one for the servers. The latter are made out in 100-calorie portions. A sample menu for one day for "fulls" is given below:

BREAKFAST	. 700 CAI	ORIES		
Grams	Calories	Protein	Fat	Carb.
Baked Apple 65	100	1	3	96
Toast 66	200	22.6	3.2	122.4
Butter 14	100	1	99	0
Cocoa	100	16	44	40
Oatmeal112	150	8	8	134
Cream 50	100	5	86	9
Sugar 13	50	0	0	50
	700			
DINNER.	800 CALO	RIES		
Clear Tomato Soup210	100	4	28	22
Saltine Crackers 11	50	5	18	32
Swiss Steak 34	100	35	48	17
Baked Potato 85	100	11	1	88
Creamed Peas 38	50	9	18	57
Graham Bread 39	100	14	6	80
Butter 14	100	1	99	0
Milk Sherbet 54	100	4	12	84
Full Cream 26	100	2	95	33
	800			
SUPPER.	500 CALO	RIES		
Cream of Corn Soup110	100	6	19	50
White Bread 37	100	14	6	80
Milk144	100	19	52	29
Butter 14	100	1	99	0
Pineapple 65	100	4	6	90
	500			

To make clear the practical working of the method, the diet of one James White will be followed through for one day. According to the chart his age is thirty-five, weight 154 pounds or 70 kg. He is now sitting up four hours daily and walking about his room. He is on full diet and is to receive 28 calories per kilogram of body weight or 2000 calories.

In planning the number of calories for each meal, 700 are allowed for breakfast, 800 for dinner and 500 for supper. On this patient's tray which is in the 2000 division of the "Fulls," are placed for breakfast 65 gm. or 100 calories of baked apple, 66 gm. or 200 calories of toast, 12 gm. or 50 calories of sugar, and 25 gm. or 50 calories of cream for oatmeal.

Referring to the chart under "Remarks" opposite James White's name, it is found that he does not eat butter. To bring up the fat content, he is given heated cream for his toast. The nurse refers to a table of values near at hand and finds that in place of the 14 gm. of butter, 50 gm. of cream must be given to equal 100 calories. She also finds from the chart that he prefers milk to cocoa. Again, if necessary, she refers to the table of values and places in his tray 144 gm. or 100 calories of milk in place of 155 gm. of cocoa for which the regular menu calls. These two changes in regular diets show how easily and helpfully patients' wishes may be regarded. The hot toast and cereal are quickly added to the tray. After inspection by the nurse in charge of this section, the tray is placed in a closed heated cart and sent at once to the patient. The more direct the more satisfactory the service. When the tray is returned to the serving room it is again inspected. If all the food has not been eaten, an effort is made to

learn whether it is because of the quantity, or the quality of the food or because of the attitude of the patient, and, if possible, the defect is removed before the next meal. If any food is left it is weighed and a record of the net calories consumed is kept. After the evening meal, the total calories consumed for the day are recorded on the patient's clinical record sheet for the information of the physician in charge.

Doubtless the criticism will be offered that this method requires too much time and help, but through its actual use it has been demonstrated that the two aims in a hospital most to be desired have been accomplished, i. e., the satisfactory nourishment and improvement of each patient at a minimum cost. The food has been wisely selected with reference to values, combined in properly balanced menus, and served in such quantities as practically to eliminate all waste.

The hospital dietitian is confronted by many problems—those of harmonizing tastes and uniting economic and physical conditions into a system which will bring best results to patients, physicians, and nurses. That she may successfully meet these requirements her work should be as carefully standardized as is that of the pathologist or the chemist. Only women of broad education and deep sympathies, filled with the spirit of service, can successfully work in this field, as yet almost unexplored and unrecognized.

A Comprehensive Text Book on Dietetics

As the name implies, "Dietetics for Nurses," by Fairfax Proudfit, is written primarily for use as a text or reference book for nurses, and it meets this great need better than the majority of books which have been available. The subject matter is divided into three sections, as follows: (1) Food and Its Significance, (2) The Human Machine and Its Relation to Food, and (3) Nutrition in Disease. The first section treats of food materials, their composition, and nutrition value. The common food materials are mentioned briefly, the table of food composition from Bulletin 28 of the United States Department of Agriculture is included, and a number of recipes, together with the number of servings and the number of calories furnished by each recipe, are given. One chapter devoted to special diets, percentage calculations, and the metric system touches lightly on points that might have been very valuable with a little more detail. The second section, The Human Machine and Its Relation to Food, is a discussion of the food requirements of the body including an enumeration of the methods of feeding and a description of the processes of metabolism. The third section, Nutrition in Disease, comprises the greater part of the book. Infant feeding and the diseases that require dietotherapy are discussed. The subject matter is supplemented by diet lists, recipes, and directions for administering treatment and making laboratory tests. The book contains what the nurse should know about the treatment of disease by diet, but includes nothing beyond her needs. However, some of the material might well have been given more elaborate treatment.

Dietetics for Nurses. By Fairfax T. Proudfit, Former Instructor in Dietetics in The Lucy Brinkley and Baptist Memorial Hospital, Memphis, Tenn. Cloth, pp. 444, \$2.25. The Macmillan Company, New York, 1918.

# \* \* \* \* A Valuable Book on Food Discoveries

"The Newer Knowledge of Nutrition" is just what its name implies—knowledge newly obtained by a series of experiments in which animals were systematically fed.

Customary classification of foods on the basis of chemical composition is in no wise interfered with or questioned by Dr. McCollum in this discussion; in fact, he says that we must "consider foods on the basis of their protein, carbohydrates, fat, water and mineral content as we have always done," but he points out very clearly the fallacy of considering these principles exclusively. In order to maintain normal nutrition and prevent disease, the "protective foods," milk, eggs, and the leafy vegetables, must have a prominent place in the dietary, as explained in Dr. McCollum's article, "Conservation in the Planning of Diets," which appeared in the February issue of The MODERN HOSPITAL, page 147. These foods contain valuable accessories which Dr. McCollum has called fat-soluble A and water-soluble B, but which have been properly termed vitamines. The correct proportion of these in the diet protects one from danger of "deficiency diseases," such as scurvy, pellagra and beri-beri. The importance of "protective foods" in the diet of the nursing mother, the harm which may result in families of limited means whose diet consists chiefly of bread, potato, and macaroni, and the need for milk in the diet of the adult as well as in that of the child are all told in language which the housewife can understand. The medical man and dietitian will find "Newer Knowledge of Nutrition" a valuable help in treating diseases requiring dietotherapy.

The Newer Knowledge of Nutrition. By E. V. McCollum. Cloth, pp. 199, \$1.50. The Macmillan Company, New York, 1918.

#### **Explosion of Cooking Utensils**

The following item from the *Institution Quarterly* of Springfield, Illinois, is significant.

"Recently the managing officer of the Kankakee State Hospital reported the violent explosion of a copper kettle in one of the kitchens. Fortunately no one was near, and no injury to any person resulted. The cause of the explosion has not been determined.

"In making his report, the managing officer referred to the fact that originally these kettles were provided with safety valves, but that a former chief engineer had removed them for reasons of his own.

"About a year ago a similar explosion occurred in one of the kitchens of the Anna State Hospital, and a patient who was working near the kettle was seriously injured. The cause of the explosion of this kettle was never determined.

"This explosion at Kankakee, taken in consideration with that at Anna, suggests the necessity of a general report to all institutions with recommendation that each managing officer have all his cooking utensils thoroughly surveyed and protective and safety devices installed."

# \* \* \* \* NEWS NOTES OF DIETITIANS

The Chicago Dietitians Association met Friday evening, April 18, 1919. The speaker of the evening was Dr. W. D. Sansum, physician at Presbyterian Hospital and Central Free Dispensary of Chicago. Dr. Sansum gave an interesting lecture on diabetes. Charts were exhibited showing different cases that had been treated at the dispensary and hospital. Various dishes, such as salads, desserts, bread (diabetic muffins), were illustrated by having the prepared food on the table. Dr. Sansum selected the diet from the various dishes, illustrating what can be given for a certain tolerance. It was interesting to the student dietitian, and, I am sure, to the layman, though there was nothing new or startling to you or to me. There

were thirty-eight dietitians present. No other business was discussed at this meeting.

Miss Cecile Haines of Sayre, Pa.—a graduate of State College, Pa.—has recently been appointed dietitian of the Palmerton Hospital, Palmerton, Pa. Dr. Roger Batchelor, the superintendent, has just returned from overseas duty.

Miss E. Grace McCullough, who has been head dietitian at Peter Bent Brigham Hospital, Boston, has been appointed by the Rockefeller China Board to systematize the dietetics of the Peking Medical College and to organize the dietary department of the new hospital now in the course of construction and connected with the college. Miss McCullough leaves Peter Bent Brigham June 1 and will spend June and July buying equipment and making other necessary preparations for her new work. She plans to sail for China about the first of August.

THE MODERN HOSPITAL extends congratulations to Miss McCullough upon being given the opportunity to do such a valuable piece of work. That she is eminently fitted to assume such a responsibility no one will doubt who knows of the things which she has accomplished in the hospital field.

Miss Ethel Torbert has gone to Lakeside Hospital, Cleveland, Ohio, as first assistant dietitian. Miss Torbert is a graduate of the home economics department of Cornell University.

Miss Blanche Joseph, field dietitian, Michael Reese Dispensary, Chicago, is offering a three months' course of training in field dietetics.

This is a new phase of social service which is proving of great value, and the course Miss Joseph is offering is well planned to meet the present need, as the following synopsis of the work will show.

The work of the first month will be devoted to (a) visiting different institutions, (b) acquiring knowledge of various agencies, (c) clerical work, and (d) visiting with the field dietitian in the homes of patients.

In the second month the time will be spent in (a) assisting in food clinic work, (b) work in the clinic with physicians, (c) following up cases which have been seen during the various clinics, and (d) work with the pediatrician among the undernourished.

During the third month the student will be given (a) charge of food clinics, (b) the duty of making out special diets for diabetic, nephritic, and gastric-ulcer patients, (c) a course at the Chicago School of Civics for one hour each week in work pertaining to social service, and (d) conferences with the dietitian.

If the student dietitian has any special preference in field dietetics and cares to specialize in welfare dietetics, a change in course will be adjusted to meet the demand.

Young women not from Chicago will be able to make arrangements for room and board, either at the Y. W. C. A. or at one of the Eleanor Clubs. Prices range from \$4.50 to \$6.50 a week. Lunch and carfare, while the student is at the dispensary, will be paid by the institution.

For further particulars address Miss B. M. Joseph, field dietitian, Emanuel Mandel Dispensary, 1012 Maxwell Street, Chicago, Ill.

Miss Mary K. Campbell, Minneapolis, Minn., is in the dietary department of the Henrotin Hospital, Chicago, for three months.

Miss Eleanor Pratt, formerly of Westmoreland Hospital, Easton, Pa., has accepted a position as dietitian at the Lawrence and Memorial Hospitals, New London, Conn.



Sterilizing Plant for Small Sanatorium

To the Editor of THE MODERN HOSPITAL:

We are building a twenty-six-room sanatorium, and are in special need of information as to the best method of equipping the sterilizers. The building will be two stories and a basement, and we expect to put in a standard sterilizing plant. We have constant day-and-night electric indirect current, and we will have for heating the building low-pressure steam. Fuel here is high and electricity costs about five cents per kilowatt for heating, and twenty cents for light.

Is it possible to supply steam for the sterilizers from the boiler used for hot water for the building? SUPERINTENDENT OF TEXAS SANATORIUM.

If you purpose to do no other work besides your sterilizing by high-pressure steam, such as the running of your diet kitchen steam tables, your cookers, your bed-pan and blanket warmers, your laundry equipment, or the heating of your domestic hot water, it would be advisable to use electricity. This is figured on the basis that the high price of coal plus the wages of a man competent enough to run a high-pressure plant without ruining it in a very short time would cost you more than electricity and not be nearly as convenient.

If, however, you are going to do all, or even the greater part of the work as enumerated above, with high-pressure steam, which is advisable, then it would not pay you to put in a separate apparatus for operating electrically.

#### Hospitals Furnish Instruments, Etc.

To the Editor of THE MODERN HOSPITAL:

Are drugs, gloves, and instruments for the dressing trays, etc., usually furnished by the hospitals? In our thirty-bed hospital it is the custom to furnish these, but I have visited many hospitals and find few this size as well equipped.

SUPERINTENDENT OF SMALL HOSPITAL.

Drugs, gloves, and instruments for dressing trays unquestionably should be furnished by the hospital, and in most cases it will be found that they are. In some instances instruments and gloves are furnished in the operating room by the surgeon, but this is not considered good practice.

# To Keep Veneer From Curling

To the Editor of THE MODERN HOSPITAL:

We are having considerable trouble with the veneer at the bottom of the hall doors in our infirmary. It is quite necessary that the floors should be frequently mopped, and the moisture softens the glue, causing the veneer to curl.

What do you consider the best thing to do in a case like this?

PHYSICIAN IN CHARGE OF EASTERN HOSPITAL.

The veneered doors which give you trouble through the frequent moppings of the floor should have been thoroughly painted on the bottom before they were used; this treatment should be applied at once to those which are still in good condition.

Specification should always require the thorough paint-

ing of the bottom edges and the staining and varnishing of the upper edges of doors, but this precaution is generally omitted except when buildings are erected under the

supervision of experienced architects.

Carefulness in mopping will also help to obviate the condition of which you complain. Doors can usually be opened so that it is unnecessary to slop water and soap against them. There appears to be no more reason for doing it to doors than there is to furniture. It is usually no harder to open a door than it is to move a piece of furniture.

#### Ratio of Equipment to Hospital Beds

To the Editor of THE MODERN HOSPITAL:

In a city of thirty thousand inhabitants, what is your estimate of the number of hospital beds that should be available? Is there any authoritative decision on this point? In the men's ward, how many toilets, baths, and urinals are necessary? What is the standard number of cubic feet of air per patient and the number of removal per hour? What is the standard width of beds, and what should be the distance between beds?

PACIFIC COAST ARCHITECT.

In a community of thirty thousand persons there should be 600 hospital beds for all purposes, the consensus of opinion being that there should be approximately one bed for every five hundred inhabitants. For a male ward of twenty-four beds, there should be two toilets, one bathtub, and one sitz tub. By no means should there be any urinals. Leading engineers maintain that there should be one thousand cubic feet of air per patient changed three times an hour. A standard hospital bed is 3 feet wide, and beds should be placed at least 4 feet apart and at least 18 inches from the wall.

# The Daily Allowance of Linen

To the Editor of THE MODERN HOSPITAL:

According to the experience of hospital administrators and their housekeeping departments, what is believed to be an average daily allowance of linen per bed for ward and private patients? Our new hospital has 300 beds and we wish to base our initial stock and the reserve stock upon this average.

HOUSEKEEPER OF WESTERN HOSPITAL.

Ward patients need one large sheet, one draw sheet, one pillow case, one bath towel, one face towel, one wash cloth, one gown each day and two spreads a week, in the usual clean cases. It is not possible to keep bed patients clean and odorless with less.

Obstetric cases, septic cases, fever patients, patients in other grave conditions, and those who have drainage or involuntary discharges average much more than this.

Private patients should have each day two large sheets, two pillow cases, one draw sheet, one spread, two bath towels, two wash cloths, and one gown in the usual cases, and more when needed. It is not possible to lay down hard and fast rules.

## Community Hospital for a Mill Town

To the Editor of THE MODERN HOSPITAL:

What would you think of the plan of placing a hospital on the third (top) floor of a community building in a mill town, with a population of twenty-five hundred families? The building is intended to house a gymnasium, motion picture house, class room, domestic science department, and other welfare activities. The dimensions of the building are 72 by 100 feet, but the hospital on the top floor is intended to occupy only half this space; that is, it is to be 72 by 50 feet.

INDUSTRIAL PHYSICIAN.

The problem is rather an interesting one, in that it shows the trend of community thought, but we believe the solution that is offered is not altogether practicable. The very time of the day when quiet is most wanted around a hospital would be the time when a community house, properly used, would be the noisiest. In addition to this, it is hard to conceive of a community house, properly built for that purpose, that would offer facilities in only half the space of the building, i. e., 72 by 50 feet, for hospital purposes. It would be very hard to divide this space for a hospital. A small, isolated house, no matter how small, would probably offer better hospital facilities, than would be found in this, interesting as the experiment would be.

#### Relations Between the Superintendent and the Attending Staff

To the Editor of THE MODERN HOSPITAL:

Can you suggest the best policy to follow in securing cooperation between superintendent and attending physicians? I am at present superintendent of a small hospital which has been forced to change superintendents five times in as many years, because of friction with the medical staff. I feel that it is my duty to do what I think will bring the most lasting good to the institution and the sick people it cares for, but I do not always find it possible to do this and please the physicians at the same time.

#### WESTERN SUPERINTENDENT.

The only possible basis for efficient administration of a hospital is one of definite understanding between the superintendent and the medical staff. It is essential, of course, to do everything consistent with good hospital practice that the staff needs and wants, and to please them in every way possible, but at the same time, it is not possible always to pay attention to the individual preferences of the members. The superintendent should establish definite policies of medical administration, taking the staff into his confidence in forming this medical policy, and then adhere to it, regardless of the idiosyncrasies of the various members. Such a procedure may work a little hardship for a while, but, as all those who have tried it have found, it is bound to react for better working conditions in the end.

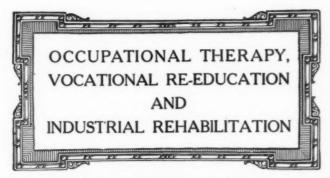
# LABORATORY DENTAL CLASS AT McHENRY HOSPITAL

# Two Skillful Hands and Good Eyes Are the Only Necessary Qualifications for Mechanical or Laboratory Dentistry —Large Field for Trained Workers

To the long list of vocations which are being taught the returned soldier at General Hospital No. 2 has been added laboratory dentistry. It is not necessary to be a graduate dentist to enter this department, and the course will appeal to all men who enjoy fine mechanical work and who are skillful with their hands.

Captain Anglemire, under whom the class is being organized, says: "Expert crown and bridge workers in dental laboratories are always in demand. In all cities of 50,000 or over, there are places for men with this vocation, and it is a profitable one."

Daily the list is growing of the kinds of instruction, which, in spite of the "employment problem," will put the doughboy back on his old peace-time basis of independence and self-support, and it is by no means the doughboy alone who will profit. The public also comes in for its share of benefit, when, as in this case, the retrained men will enter a field where men are needed. A number of professions are being "discovered," to the lasting benefit of the worker and the public.



Conducted by DOUGLAS C. McMURTRIE, Director Red Cross Institute for Crippled and Disabled Men and ELIZABETH G. UPHAM, Advisor in Occupational Therapy, Milwaukee-Downer College.

#### THE NEW UNDERSTANDING

The Same Sympathy Which the War Has Created Between the Classes Must Exist Between the Crippled and the Sound—The First Essential of Rehabilitation Is to Do Away With the Cripple's Idea that He Is Different from Other Men

BY HELEN I. HOPPIN, Milwaukee-Downer College, Milwaukee

The tendency of our day toward democracy is expressed in more ways than in the freeing of serfs and the organization of charities. In a hundred directions it begins to be felt that if things are unfair, it is up to us to stop them. Responsibility supplants indifference. The theory of democracy is passing from the state of being a theory, and more and more becomes a feeling. Sons of our "finest nurtured," drawn into war, have mingled with the men of industry; after going through the fire together, neither class can ever slip back into its old contempt of the other. It can no longer be a matter of indifference to a cultured man to come face to face with a cripple. If formerly, on passing the man in the street, swinging the everlasting pickaxe and sweating in the old, unblushing way, the man of the world regarded him with the preoccupied glance of one who notices a stone in his path, he will do so no more; that attitude belonged to pre-war days, and is on the way to being utterly gone.

These conditions, beside bringing a new understanding to men in general, and warming the heart with a sort of universal enthusiasm, have more than a sentimental appeal. They make possible great and practical gains. For it must be understood that, with all the irreproachable energy and efficiency of charitable methods, a few people's exertions cannot do the poor and the crippled any great degree of good. Failures mark the paths of many great-hearted movements; regarding their flawless organization, we have been wont to be astonished at this. The poor and the crippled did not seem enthusiastic. The fact, no longer to be denied by the practical, is that it takes this same understanding between all men to run the cold machine. And with the force of the democratic movement, now actually coming into vital life, such success should follow as has never been met by the movements of charity unsupported by popular understanding.

The new conditions of democracy apply to the case of cripples with especial force, for the indispensable, basic principle on which the whole system of their treatment is built is the understanding attitude toward them. If the cripple is approached in the right way, it is quite possible to gain his cooperation in efforts for rehabilitation and vocational education. What can be done in this line is shown by the experiences of Cleveland.

A "Survey of All the Cripples of Cleveland, Ohio, in

1916," was made under the auspices of the Welfare Federation of Cleveland and reported by the director and associate director of Massachusetts General Hospital. It records an effort to locate and assist all the disabled workers in the city. From the point of view of service to the growth of sympathy between the crippled and society, this venture was particularly worth while. The workers sent about to interview the cripples found that, as a rule, the cripples were willing to be interviewed, interested in the report, and, above all, glad that an effort was being made to bring about an understanding of them on the part of normal people. The gathering of these statistics was a valuable work in several ways. The systematic canvass of the first district resulted in the discovery of 65 percent more cripples than had been reported to social agencies. In its effect on the class of the disabled in general, the canvass was most beneficial. It was an effort in behalf of all of them, and it brought them together in interest. It gave them a new outlook on the rest of society, too, and made them feel that the world was not closed to them. In a good many cases, it opened to them, through vocational training or apprenticeship to industries, the way to a steady job and economic independence. Most important of all, it stimulated some, who had been lacking in incentive, by acquainting them with the records of others who had overcome their handicaps.

It often takes more than a man's natural pluck and spirit to carry him over an obstacle such as a physical handicap. The ordinary individual, deprived of his right to bodily vigor, is bound to be tremendously set back. In many cases of handicap, especially of sudden disability, it never occurs to the victim to do anything but yield. It is the natural attitude. But it must be considered that, while it is real and natural, it is not necessary. Where a man's native spirit deserts him, that is the place where influence must begin. Every man has it in him to overcome, but he often has to have the possibility proved to him. Here is where the new understanding applies. This is the work laid out for other men by their new realization of being their brothers' keepers. And the way the Cleveland workers took to go about it was to set before the cripples, in conversation and in their illustrated publication, the true stories of men who had found their power over disability.

Cleveland furnished plenty of material for such inspiration. First of all, there is the story of Judge Moylan of the Municipal Court. "There were three men in Cleveland who had lost both arms above the elbow. One of these is a street beggar, the second makes a small living at peddling from a wagon and guides his horse by keeping the reins about his own neck and shoulders, the third (Judge Moylan) is a judge in the municipal court who took his bar examinations writing with the pencil held between his teeth." Along with his story, there is published in the report the account of a successful dressmaker who was so crippled by infantile paralysis that she has never walked, and operates her sewing machine from a wheel chair, using an iron poker to run it. There is the story, too, of a newsboy with club hands and feet, and of a sander in a furniture factory who lost his right arm at the age of forty-two, but fitted himself out with an appliance of his own invention and went back to his old job. There is also a one-armed mechanic who has an automobile repair shop, and a one-armed locksmith who tightens his vise with his right knee, and competes skillfully with unhandicapped workers.

By such examples, the disabled are made to feel "that it is what is left and not what is gone that matters." It is necessary to the cripple's success that his mental atti-

tude toward life and toward his disability be brought around from one of yielding to one of overcoming. And to make him attain this goal, it is necessary to revise completely the ancient attitude of the normal toward the crippled. As is brought out in the introduction to the Cleveland survey, "the cripple finds that the hardest obstacles to overcome in his whole career are often the ideas in the minds of the rest of us-our mistaken ideas about cripples. An ambitious mechanic, looking for a real job, finds himself classified with the shoestring peddler on the street, just because he has the same disability. A man with crutches hears people 'speaking up loud' to him, exactly as they would to a person with smoked glasses or to foreigners whose language they do not understand. These apparently trivial things are in reality signs of a general inability to see the man behind the handicap, and are the very things that make the cripple think he is helpless. They contribute, without doubt, towards idleness among cripples and help create the group of sensitive recluses who only wish to come out after dark, and the discouraged workman who keeps his crippled hand well hidden in his pocket."

On the reconciliation of the cripple to his new relations with the industrial world depend all his future successes—the success in physical reconstruction, in training for workmanship, in vocational placement, and in his final settlement in society. The mental attitude is more than a sentimental matter. It has a physical and an economic effect, and demands attention from the medical and the vocational standpoint. It is the most vital demand in the program for the rehabilitation of cripples that the war-born unity between the classes be cherished and made to include a new good will between the crippled and the sound.

# BLIND CIVILIANS RECEIVE EXPERT TRAINING IN MASSAGE

American Blind Masseur Class Established in Chicago— Inspired by Successful Work at St. Dunstan's, England—Hospital Positions Open to Class of Eight

By MRS. SIDNEY McCALLIN, Chicago, Formerly a Worker on the Staff of St. Dunstan's Hostel, London

Some months ago the initial blind masseur class of America was established in Chicago under the personal direction of Peter J. Peel, assisted by Dr. Jacob Bolotin,



From the land of the peddler, the civilian blind have entered the professional world.

blind heart and lung specialist. Through the cooperation of Dr. Bolotin, eight carefully chosen blind men and women entered this class. With St. Dunstan's Hostel in London, England, the great example of successful training of the blind, such a far cry from Chicago, the teachers of this class found their pioneer days beset with uncertainties and unexpected difficulties. In the beginning Dr. Bolotin gave orally the help that was so strongly needed in his lecture course to this class, which treated with the fundamentals of anatomy and physiology. Recently a set of fifteen books in revised British Braille have been sent to Chicago for the use of the class, showing the continued interest of Sir Arthur Pearson of London, the founder of St. Dunstan's. These books are a compilation of the technical knowledge obtained from the most scientific books on this subject. The works of Hudson, Cunning, Kurre W. Ostrom, Palmer, Halleburton, Ashby, Thornton, G. F. Stout, and Dr. Justina Wilson have all been duly recognized. This set is a great acquisition, as the books augment the usefulness of Dr. Bolotin's department and are a source of great pride to the class.

Technical knowledge in hand, the class has come to Mr. Peter Peel, ready for his capable instruction in the actual operation of massage. Only the expert could appreciate the difficulties in the path of Mr. Peel, as he attempted to interpret massage to this first group of blind students, but the encouragement of success, after the first few months of uncertainty, gave the instructor the needed inspiration.

The next bend in the road brought the class face to face with a real need, the possession of a manikin, so that the already deft fingers might become more sensitive. Mrs. Lewis Louer of Chicago made the purchase of this figure possible, and so not only benefited this class but the blind masseurs of the United States for many years to come.

With the coming of the time for graduation, their teacher pronounces the blind masseurs a spectacular success, and, through his generosity, these students will have the unusual privilege and advantage of working in the scientifically equipped office of Mr. Peel under his personal supervision, until the time when he feels that they are ready to step out from under his personal care and are equipped to take up positions in Chicago hospitals which are now open for them.

Thus from the land of the peddler, the civilian blind of America have entered the gate of the professional world, and from the American blind civilian to the blind soldiers of Great Britain goes the message: "We are grateful to you over there for the thing you have shown the world, what we, over here, may do. We appreciate your splendid example and the joy of service will be ours as we minister to our fellow men."

# EMPLOYMENT OF BLINDED SOLDIERS IN GERMANY

Metal or Watch Industry the Most Profitable for Blind— Factory Preferable to Home Work Because of Association with Other Men

A report on the experience of the Württemberg Bureau of Vocational Advice in finding employment for blinded soldiers, by Mayer, in the German monthly *Die Kriegsbeschädigtenfürsorge* (Aid for disabled soldiers) brings to light many possible occupations for the blind, and new discoveries are still being added to the list.

An investigation conducted by the Württemberg bureau through personal visits to factories, talks with manufacturers, superintendents, and workmen, and tentative placement of blinded soldiers revealed about one hundred different operations which could be performed by the blind, and indicated the conditions under which these could be most successfully performed. These operations were found in over thirty industrial establishments, engaged in the manufacture of watches, mouth organs, electrical goods, optical goods, airships, rifles, automobiles, metal works, cardboard boxes, paper, and felt and straw hats.

The most ideal conditions for the employment of the blind were found in watch factories. The processes in watchmaking are not noisy and there are many opportunities for interesting machine work. Home work can also be given to men whose condition makes it desirable, and in some cases it is the best solution of their problem. Work with the lathe and drill press which could be performed by the blind was found in electrical plants, the manufacture of optical goods, and the automobile industry.

Operations in which blind men can work in cooperation with normal men or in groups under the supervision of a sighted head-worker were found to give them great satisfaction. Factory work is as a rule recommended over home work since it assimilates the blind among normal workers, a very important factor in their general development. If a man is obliged to stay at home, the investigation disclosed that he can earn more by working for the watch or metal industry than as a brush-maker or basket-maker.

The bureau believes that in general the blind should be paid by the time, but that when they are employed under the same conditions as sighted workers who are doing piece work they, too, should be paid by the piece. This practice is in accord with the principle of treating the disabled as much as possible like a normal man, and, with the skill which he develops, it does not decrease his earning power.

No preliminary training was found to be necessary for factory employment; the requisite skill can best be acquired at the plant itself. That the blind who have been employed in factories have given general satisfaction was testified to by the employers. The blind themselves generally declare, according to the report, that work in the factory is less tedious and more agreeable than home work and that the intercourse with other workers is in itself a distraction which they greatly appreciate.

Of the forty-eight blinded soldiers aided by the Württemberg bureau, sixteen were returned to their own or their parents' farms after having been taught basketry as an additional occupation; eight were enabled after training to set up as independent basket-makers; one was he!ped to start a small shop for brushes and baskets; five were placed in watch factories; six in electrical plants, and two at the Mauser Arm Works.

#### INDEPENDENCE FOR THE HANDICAPPED

### Soldering Cans Means a Livelihood to Many Men in France—Only One of Many Trades Open to the Handicapped—New Ones Discovered Every Day

The one-legged shoe-string vender propped on his windy corner is disappearing, and the one-legged telegraph operator or bookbinder in his office or workshop is taking his place. Artificial limbs plus training equal independence and comfort for men who would have had to eke out miserable, half-mendicant lives if they had been injured in any war but this. In England, France, and Italy—all



Crippled French soldiers soldering cans. The wooden leg and crutch in evidence do not interfere with the work they do.

the warring countries—the work of physical and vocational rehabilitation is going steadily on. In working out improved ways and means the Red Cross has a great mission in its Institute for Crippled and Disabled Men in New York City.

# \* \* \* \* HOW RETRAINING IS OBTAINED

#### Processes Involved in Determining the Best Course for Wounded Men

The processes by which disabled men are handled through the branch offices of the Federal Board for Vocational Education are interesting. There are fourteen districts with branch offices in as many cities of the United States. Each district board is a unit for its district comprising several states. It is headed by a district vocational officer, a corps of vocational advisers, medical advisers, and clerical force. When a disabled man makes application to his district board, his army medical record is obtained and steps are at once taken to present his claim to the War Risk Insurance Bureau for compensation, for unless he has at least a 10 percent disability, or is decided a "compensable case," he is not entitled to receive training. He is then given a survey by the medical officer of the district board, a vocational adviser makes up the record of his case, ascertains what his wishes are in the way of retraining, and the record is then brought before the "case board" which is composed of the district vocational officer, the medical adviser, a prominent business man representing the employer class and accustomed to dealing with considerable numbers of men in the way of employment, a member of one of the recognized trades representing the employed class, and probably another business member of the community.

This "case board" then takes up the record as prepared by the vocational adviser, and, in many cases, brings the disabled man before the board for consultation. The "case board" makes a recommendation, and gives the first, second, and third choices to the disabled man as to the training he wishes to take. This record is then forwarded to the central office at Washington, where it is passed upon by the medical officer of the rehabilitation division, and finally must receive the approval of the director of vocational rehabilitation. When this has been accomplished, training is immediately available, if the decision of the director is favorable, and the man is at once started upon his course of training at an approved institution for the course for which he has been decided best fitted.



Danville and Boyle County Hospital Association

To the Editor of THE MODERN HOSPITAL:

So far as I know, we have the only fireproof hospital in Kentucky, except the City Hospital in Louisville. We built our hospital at a cost of \$45,000, and it is all paid for. The county allows us \$60 a month, and the town \$50. Our monthly expenses are \$1,100.

We have thirty-six private rooms, four four-bed wards, and two two-bed wards. The highest daily average of patients we have had is fifteen. We employ three graduate nurses, three practical nurses, three maids, a house-keeper, a house man or janitor, and two cooks. In addition, we average two special nurses on duty all the time.

Our patients average two-thirds private-room patients

and one-third ward patients.

Immediately back of the main building on the ground floor, connected by a ten-foot, glass-enclosed hallway with brick walls or columns between the windows, is a rear building containing two four-bed wards and five private rooms for colored patients. Above this rear building and connected with the ground floor by elevator only, are the five maternity rooms and the operating room. By putting the operating room back there, we keep the fumes of ether out of our main hospital.

The question of the number of patients each nurse can care for properly in a day without being overworked is very important, and I have taken it up with quite a number of hospital superintendents. You would be surprised at the difference of opinion on the subject. So far as I can gather, in Chicago the average is six private-room patients or ten ward patients. In some places they require the nurse to look after from ten to thirty patients if they are not seriously ill.

The lowest estimate we have had from any source for a hospital like ours is five patients to a nurse, averaging through the month, of course. We believe that this is a question which ought to be generally understood for the



Fig. 1. Fireproof and up-to-date is the hospital of the Danville and Boyle County Association.



Fig. 2. A cozy spot in the sun parlor of the hospital.

good of the hospital management, the good of the patients, and the satisfaction of the nurses. If there were a universal standard by which to consider this part of hospital work, I feel sure it would do nation-wide good. As things stand now, some small hospitals of which I know do not have enough help to look after the patients properly, while in other cases the nurses demand more help than any small hospital can afford to give and live.

C. N. SMITH,

Manager, Danville and Boyle County Hospital Association, Danville, Ky.

#### Some Hospital Problems in India

To the Editor of THE MODERN HOSPITAL:

Your letter reached me at the time when we were in the midst of the terrible influenza epidemic. In its sweep across so many countries, it did not spare India, taking as toll many, many lives. I had been away to a conference in my own mission and on my return found several of the staff already ill. Within the week almost all were down. All the nurses on the women's side were ill, one developing double pneumonia. On the men's side all the ward-attendants had contracted influenza, one there also having pneumonia. Among the patients on the women's side there were several partly trained and two fully trained nurses, who were able to help us out, but on the men's side we could only call in some untrained coolies and direct them as best we could. Fortunately, the head compounder on that side remained well. In fact, not only the staff, but ayahs, sweepers and almost every one employed on the place was ill. In spite of this fact, however, only a few of the hundred patients contracted the disease. Four patients with very advanced cases of influenza died, and two or three already had it when admitted. Three or four had only mild attacks. This we feel was partly due to the open-air life, and the people here who have very little faith in open-air treatment were greatly impressed by this fact.

The nursing of male patients has always been a great problem here, for in most places in this country it is not considered the proper thing for female nurses to nurse male patients. This is especially true if the nurses are young and unmarried women. On the men's side we have a compounder in charge, assisted by four or five ward attendants. These men have very little or no education (one is just learning to read and write) and, although I have made several attempts to teach them, I almost gave up in despair. Anything purely mechanical they can do well, but anything requiring thought and initiative is beyond them. Unfortunately, this class is not conscientious. They will work well only while they are carefully

supervised, and they are not above bribes. They will never acknowledge themselves in the wrong when reprimanded, but will take the scolding and punishment which one metes out to them because one is angry or has a grudge against them. If they consider the punishment too severe, they leave; and, because of the fear of infection and caste prejudice, it is no easy matter to secure helpers. When left on night duty, they will curl themselves up on the floor and take a nap, and when I catch them sleeping it does not feaze them. They seem incapable of realizing the responsibility of their post.

Two years ago four young men of some education, whose cases were arrested, but who were advised to remain in this climate, expressed a desire to take up nursing upon the advice of the doctor. I commenced to train them for work for this institution, and, after two months of theoretical and practical work, they became quite useful. On my return from the hills, where I had spent a month of the hot season, I found that two of them had left, the first to return to his teaching and the second because he did not feel strong enough. A few weeks later one of the two remaining boys asked permission to go into the town, a distance of four miles up and down hill. He was given permission to go, on condition that he would perform the journey there and back in a jutka. Being unable to secure a jutka for the return journey, he decided to walk. The next day he had a hemorrhage from which he never recovered. The fourth lad remained with us about a year and half. His work was not satisfactory. He was sulky and would refuse to do any little extra work required of him, although he was quite strong enough to do it. We kept him on for his own sake, always hoping for a change, but when one day we discovered that he was stealing medicine from the institution and sending it to his father, who was making money out of it, we felt that our only course was dismissal. All this can not help but be discouraging, especially during We come out here with high ideals the first years. and attempt in a short time to lift the profession here to the same plane as it holds in the West. This is not possible, and, although I have spent five and a half years in the country, it is hard for me to adapt my Western ideals to Eastern facts. However, nursing superintendents throughout India are working together to raise the standard of nursing, and, although very little has been done for the training of male nurses, we do not despair. The training of women nurses, too, is still far below our standard of efficiency, but a better class of women are now taking up nursing as their life work.

Another great problem has been the laundry question. As you probably know, this work is done by a particular



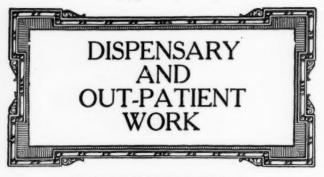
Fig. 1. Water carts bring water from a hilltop two furlongs away.



Fig 2. Interior view of chapel which is also used as lecture hall

caste called the "dhoby" caste. The clothes are taken to some stream or tank and there they are beaten upon a flat stone raised just out of the water. In the first place, they are not always thoroughly washed, and then, too, the wear on them is very hard. The irregularity was also a trial, for often we waited two or three weeks for our clean clothes. We finally decided to establish a laundry of our own, which, I assure you, caused considerable comment. We began in a very crude way, with the hope of improving things in time. In the first place, we got the assurance of two Christian men that they and their wives were willing to learn and do the work. This was a decided step, but we had to assure them that they would be called "laundry men" and not "dhobies." We then built three cement tubs, two of them 2 feet high and 3 feet square, and one 4 feet high and 3 feet square. The latter was for soaking the clothes and had a wooden cover fitted on it with a lock. These tubs were built in the open, with no roof overhead, near the bed of a stream which has running water during the rainy season. We purchased two Wendle washers, some blueing, fuller's earth, soda, ammonia, a couple of buckets, and a mud pot. Two large brass vessels had been given by friends, and these we used over open fireplaces to boil the clothes. One Sunday evening in August the tub with the cover was filled with water, ammonia added, and the clothes from one ward which had been previously disinfected in the sterilizing room by formaldehyde vapor were soaked. The next morning many gathered to see the beginning of this wonderful laundry, and all with one accord predicted failure. As they stopped to inquire from time to time during the morning they would ask the men at work, "Are the clothes coming clean?" and the reply was always the same, "Wait and see." In the evening, when a nice large bundle of clean, sweet-smelling clothes was brought up, pessimism vanished, and since that time we have continued to do our own laundry work. A floor and roof have since been built about the first tubs, other tubs have been added, and better fireplaces built under the roof. The unwalled build ing is large enough to dry the clothes in rainy weather, and we hope to add a room at one corner at a later date. Thus far all the work has been only rough-dried. My next task is to teach our helpers how to iron and then to complete the process by washing, starching and ironing. In this desultory manner I could go on writing endlessly, for this institution is of much interest and connected with so many missions. My services have been given to this work by my own mission for this term in India.

AGATHA TATGE, R. N., Union Mission Sanatorium, Madanapalli, S. India.



Conducted by MICHAEL M. DAVIS, Jr.

Director of the Boston Dispensary.

Please address items of news and inquiries regarding Dispensary and Out-Patient Work to the editor of this department, 25 Bennett street, Boston, Mass.

# THE CLINIC EXECUTIVE IN AN OUT-PATIENT DEPARTMENT

Keeping Doctor and Patient Together Until Course of Treatment Is Completed Her Chief Function—How She May Prove of Valuable Assistance to Doctor

BY BERTHA CHACE LOVELL, Social Worker, Boston Dispensary, Boston

For better or for worse, some form of dispensary or hospital out-patient department seems to have become a recognized part of the machinery for community health. Even though poorly equipped and run, it is probably better than no medical facilities at all; but how much better it is depends entirely upon the standards of its physicians and administrative officers. That these standards have been markedly rising during the last few years, and that new conceptions of the functions of a clinic open to the public at a minimum cost have been formulated, is apparent even to a superficial observer.

In no way, perhaps, is this rise of standards more marked than in the stress that is now being laid on the importance of the completion of a course of medical treatment, once it has been started. It is perfectly true that with some diseases the loss of the patient before the doctor has discharged him is not essentially serious. It may mean only a slightly delayed recovery or a little less adequate education of the patient or his family in improved hygiene. Possibly we still feel we can afford to ignore both these limitations. But most untreated disease we cannot afford to ignore.

The problem, then, is to keep doctor and patient together until the doctor has had a chance to do the job the patient has asked him to do—either to cure him or, if there is no cure, to tell him how to make life as little of a burden as possible. The doctor, presumably, will do his share of the staying together, provided the out-patient department gives him some equivalent for his services—if not in money, in opportunities for practice, for research, or for teaching; and he is encouraged to stay, if he can have these opportunities, without wasting what seems to him an unreasonable amount of time in the clinic.

Here is the point at which the clinic executive enters. She appreciates the value of the doctor's half hours, and she knows how to save them. Because she has a system intelligently planned and efficiently run and a well-developed social consciousness—also (unless the clinic patients number less, say, than twenty) a clerk to handle the routine work—she can accomplish much toward speeding up the clinic.

First, she can see that Patient 2 follows immediately

upon the heels of Patient 1 to the doctor's desk, and that both Patient 2 and No. 1 belong to that particular doctor's following. Secondly, she can see that patient and medical card arrive together, and-if she is a paragon of a clinic executive-she will be sure that no medical card reaches the doctor's eye without its full quota of laboratory reports. She will take charge of the machinery of transfers to other clinics or to such departments as the x-ray. She will be on hand every day, always, to give her assistance in straightening out the tangles that arise over forgotten or obscure points of institution policy that may necessitate a visit to head social worker or superintendent or director, or all three. And it is part and parcel of her job to meet emergencies, from a case of hysteria to an only-too-narrow escape from a childbirth within the clinic itself.

Even in aspects of the clinic work that seem at first glance to be the prerogative of the doctor, the use of the clinic executive may prove to be expedient. In one clinic for the treatment of women with gonorrhea in a large eastern out-patient department, the clinic executive explains to every woman who receives a sheet of instructions for home treatment ("Routine 1," "Routine 2," etc.) how these are to be followed, and repeats and reiterates until the woman understands-understands, that is, not merely in a general way, but in a way that applies to her own method of living, whether it be in a hall bedroom or in a family-of-twelve tenement. If the woman did not comprehend these instructions, the doctor's medical interest in the case could hardly be of long standing. Yet, if he attempted to give the explanation himself daily, the resulting sacrifice of his lunch hour would probably seem to him of minor importance in comparison with the sacrifice of his equanimity.

As unnecessarily prolonged interviews with patients can be avoided if a doctor has a clinic executive at his elbow, so can unnecessarily frequent interviews with relatives and friends of patients, and with over-zealous social workers outside the clinic. The clinic executive acts as a buffer. She holds off from the doctor every unnecessary interruption, letting in to him only those whose need of him is evident. And she is interpreter, not only to him but also to those denied access to him.

When a social problem rises to obstruct medical treatment the clinic executive and the doctor can be in conference together on it from the moment of its inception. And because they are both integral parts of the clinic and each understands the other's responsibilities and routine, they can continue their conferences from day to day, and from week to week sometimes, as the medical and social action on the case progresses, without their join, parleys interfering noticeably with the smooth running of the clinic processes.

It is this phase of the work of the clinic executive that we may expect to see developed on a much larger scale in the future. In one sense only can it be said to save the doctor's time. It enables him to get data on his cases which make really scientific treatment on his part possible, and to get it without any appreciable effort. For it is the clinic executive, not the doctor, who will write to hospitals and to other medical men for past medical histories, and who will consult with those who have had previous experience with the patient and know her type of physical and mental reactions. On the other hand, the presence of the clinic executive will perhaps in the long run mean that the doctor will spend even more time in the clinic. But it will be time spent in a more intensive study of the individual patient. It will not be wasted.

It is, then, not an alarmingly difficult matter to keep the doctor in the clinic, even if, to do it, the institution must safeguard him from distractions.

But to keep a patient in the clinic is a proposition of a much tougher fiber. An exacting individual, perhaps, he is, but he makes at least six demands upon an out-patient department: (1) ordinary creature comforts in the building itself; (2) no exaggerated waits in the ante-room of the clinic; (3) a square deal as to the order in which he is admitted to the doctor; (4) an understanding of the medical situation that meets his intellectual and emotional needs; (5) such arrangements as to payment or nonpayment of fees as can be fitted into his scheme of life; and (6) a firm but persuasive hand stretched out from the clinic to draw him back if he stops his treatment too

It is not for the clinic executive to provide the creature comforts in the clinic. But no one is at a better point of vantage than she to appreciate how fully or how poorly the institution is providing for the personal well-being of the patient while he is within the institution walls. She knows whether there is a secluded place for a young mother to nurse a baby she has brought with her, whether there is enough bench room so that the patients do not elbow one another uncomfortably on a hot day, whether there is a place where an exhausted woman may lie down in private, whether there is a satisfactory arrangement for a patient who has had a severe reaction after an administration of one of the arsenical compounds, and whether intimate conversation with doctor and with social worker can be carried on behind closed doors or only in the most obvious publicity.

To eliminate undue waits in the clinic is again only in part the function of the clinic executive. But, because she is in the clinic day in and day out, she knows how the delays are being caused. Perhaps there is an insufficient number of doctors for the size of the clinic, or the doctors are arriving so late that the clinic stretches out to the point of attenuation. Perhaps the doctors are held up by lack of sufficient number of examining rooms and nurses to disrobe their patients, and by inadequate apparatus and equipment. It may be that the medical cards are slow in arriving from the record room. Whatever the cause, the first step toward the prevention of delay is a realization by the administration of the institution that it exists:

Quite definitely, however, within the province of the clinic executive is the supervision of the patient's admission to the doctor in his proper turn. She superintends, either personally or through the clinic clerk, the entire process of the clinic admission, and it is her fault if this is a failure. Fortunately, she understands that justice is relative rather than abstract, and she knows that a man who has "asked off" from work for an hour and a woman who has a sick child at home should take prece-

dence over, say, a care-free girl.

If the doctor's time is limited, that of the clinic executive -theoretically at least-is not, and it is her responsibility to see that the patient's demand of an adequate understanding of the medical situation is met. The doctor gives the essentials-briefly or at length. The clinic executive, in the interview which she has with every new patientideally, it would be with every patient-before he leaves the clinic, fills in the gaps in the patient's mind, or, if the gaps are too extensive, calls in the doctor's aid. The clinic executive needs a semblance of leisure. Her attitude should invite question and confession. She will get both if she is ready for them, and in such a way as to give her a very real insight into the factors that, disre-

No factor will appear more frequently, probably, than that of the patient's lean purse. In a study made recently in a syphilis clinic it was found that 75 percent of the patients who had stopped their treatments before the doctor had discharged them had done so because they had felt unable to continue to meet the cost of the treatment, in

garded, will work directly against the patient's recovery.

fees, in drugs, in carfare, and in loss of working time. Surely, unless someone in the institution is at liberty to remit fees when the patient is without question unable to make full or part payments, it is useless to run a clinic for any but folk of ample and assured income.

And the only person who knows beforehand that the patient will have to stop his visits to the clinic, unless he can be treated without charge, is the person who has talked with him about his finances-not once only, when he was first admitted to the institution, but from time to time in the come-and-go of the clinic. The aim of the clinic executive will be a working knowledge of the budget of every clinic patient.

Needless to say, there will be many instances in which the remission of the out-patient department fees will go only a small fraction of the way in meeting the patient's financial difficulty. But that, as Kipling would say, is another story. And a good clinic executive will toe a sufficiently straight line so that she can, at any moment, if more problems arise than she can swing unaided, lay her

hands on a good case worker.

The last demand a patient makes upon the institution is one that apparently has gone unheeded longer than any other. Perhaps it is only just now being recognized as legitimate. He must, if he is the average patient, be "followed up." The most effective part of the "followup," of course, is that done in the clinic itself before the patient leaves it. The impression made upon him by the doctor and the clinic executive and the fact that continued treatment is made possible for him by means of adjustment of finances, clinic hours, etc., is what really counts. But the letters from the clinic, and sometimes the calls from the clinic, are, unfortunately, also indispensable. A really workable system of attendance cards that automatically brings a patient into notice as soon as he becomes overdue, and a series of carefully phrased form letters can be considered an essential part of a clinic executive's "fourteen points." She knows the individual patient to whom the card is sent, and, whether she actually handles the pen that addresses the letters or not, she makes the follow-up work a human process rather than a mechanical one.

For to her the mechanism of the follow-up work-quite as much as the attention to the demands of the patient, and the effort to render the doctor's time in the clinic worth while-is only a phase of a larger plan. Conscientiously and consistently she is a part of the movement to make the out-patient department a dominating factor in the achievement of public health. And, because she is an executive who sits in the half-way house of the interpreter, she is, she believes, a necessary part.

# . . . . NEW DRIVE ON VENEREAL DISEASE

Exhibition to Show Evil Effects of Disease and Means of Stopping Its Spread-Creditable Work Done Among Discharged Soldiers and Sailors

With the change of its name to Illinois Social Hygiene League, the venereal disease organization formerly known as the Red League plans to open a new drive against social diseases in Chicago and Illinois with a public exhibition

held in connection with its annual meeting. The exhibition will vividly illustrate the evil effects of venereal disease, as well as the proper means to prevent its spread, and will probably include a public showing of the two government social hygiene films, "Fit to Fight" and "The End of the Road." A series of four introductory letters will be sent to 6,000 employers of labor, and framed signs for use in shops and factories will be distributed.

Soldiers and sailors recently discharged are given free treatment for venereal diseases at the dispensary of the Illinois Social Hygiene League, 118 W. Grand Avenue, Chicago, according to a plan previously entered into with the State Department of Public Health. More than one-third of the hundred or so patients received monthly at the dispensary are discharged soldiers and sailors who have been referred to the League for treatment by the American Red Cross and the U. S. Public Health Service.

Aside from the soldiers, nearly 1,000 men, women and children have received treatment at the dispensary, and over 5,000 treatments have been given since the opening of the dispensary in May, 1918. At the present time 700 monthly treatments are being given, many of them to free patients. The staff consists of nine physicians, three of whom are women. Four clinics for women are held weekly.

The total monthly disbursements of the dispensary average \$1,500, only one-third of which comes as fees from patients, the remainder being raised by contribution. A campaign for funds to support the increased activities of the League is announced. In order to permit the taking over of increased space to continue the free treatment of soldiers, sailors, and marines and prevent them from infecting their families at home, the sum of \$1,000 is needed.

# SOME "DON'TS" IN HOSPITAL BUILDING

# Profit by the Experience of Others—These Suggestions, Picked Up Here and There, May Save You a Mistake

Don't build on a large attic, not reached by an elevator, for storage room; it takes up good space, which could be put to a better use.

Don't make your basement pantries so small that stock goods have to be hauled to the aforesaid attic for keeping.

Don't believe that a small amount of ceiling radiation will keep the basement warm or keep the servants who live in it satisfied, or produce the right temperature for x-ray equipment, plate development, or for the operator's feet in winter.

Don't put the maternity room over an occupied bedroom.

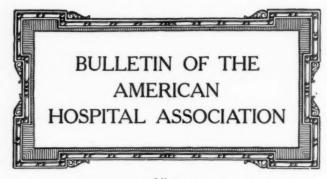
Don't forget to put a drain or two in your sterilizing and operating rooms, and have the walls of the kind that will not peel off when steamed.

If you plan to have the doors wide enough to wheel your bed patients out on the sun porches, don't forget to have them wide enough to prevent the bed from taking a portion of the woodwork along with it.

Don't have your steam plant in the building, if you can help it, especially under rooms occupied by patients. Pounding on pipes when repairs are necessary, the throbbing of steam, and the rising soot scrape the nerves of normal people and are annoyances never borne by patients patiently.

Don't have walls that cannot be cleaned.

There is no good in arguing with the inevitable. The only argument available with an east wind is to put on your overcoat.—James Russell Lowell.



Offices:
728 Seventeenth Street, Washington, D. C.
308 Anisfield Building, Cleveland, Ohio
Monthly Bulletin issued by the Executive Secretary
308 Anisfield Building, Cleveland, Ohio
HOWELL WRIGHT Executive Secretary

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# Meeting of the Board of Trustees

At the meeting of the board of trustees of the American Hospital Association in Washington, D. C., April 25, 1919, it was voted upon a proposal made by the American Red Cross that the American Hospital Association act as agent in distributing to hospitals a certain amount of gauze and other material, now in possession of the Red Cross and not likely to be used for war purposes, provided, however, that the association limit its work with reason to the collecting and preparing of lists and other data concerning hospitals and that it assume no obligation for expense incidental to storage, insurance, distribution, or transportation.

The legislative committee was instructed to draft a legislative proposal for Federal incorporation of the American Hospital Association, and to cooperate as far as possible with existing committees and other organizations relative to the proposal that Congress be urged to enact legislation providing for a national department of health.

The board of trustees adopted the policy of establishing service bureaus or departments of the association as a general policy, and recommendations of the committee on out-patient work to establish a service bureau on dispensaries and the community relations of hospitals were approved.

The president reported on the conference on hospital standardization to which he had been appointed a delegate at the meeting of the board of trustees on March 17, 1919. The following resolution was offered and accepted:

Resolved: That the American Hospital Association accept the responsibility of cooperation with the American Conference on Hospitals, organized in Chicago April 21, to the extent of complying with the request of this organization for the appointment of two delegates by the president to represent the association, to carry out joint programs on the subject of hospital standardization with the American Conference on Hospitals at the annual meetings and in other ways to recognize that the work of the American Conference on Hospitals is to develop and express ideal hospital conditions and minimum standards. It is understood that the expense of this work is at present to be borne by the American Medical Association, except the personal expenses of the delegates, which are to be borne by the various organizations appointing delegates.

The secretary reported that 110 hospitals had applied for institutional membership and 107 applications had been approved by the committee; that office records for institutional membership had been approved and were being printed; that the membership certificates had been approved and would be mailed shortly to the hospitals with the request that they appoint their delegates.

### Service Bureau on Dispensaries and the Community Relations of Hospitals (Plans Approved by the Board of Trustees, April 25, 1919)

#### PRESENT GROWTH OF ORGANIZED MEDICINE

Interest in all kinds of health work is increasing throughout the country. More and more communities are studying their own needs for health service and for the medical care of that part of their population which cannot afford to pay for all it requires. Many hospitals, public health departments, and voluntary health or charitable organizations, are thus seeking to ascertain what is locally needed in the way of more hospital beds, in establishing or enlarging dispensary service, or in advancing or improving other forms of medical health work.

Dispensaries have grown with especial rapidity in recent years. In 1900 there were about one hundred dispensaries in the United States, according to the census bureau. Today there are fully three thousand. Dispensary standards have advanced. There is an increasing demand for information and advice concerning the construction, equipment, organization, and management of outpatient institutions. The same condition is found in social service work in hospitals and dispensaries.

### OBLIGATION OF AMERICAN HOSPITAL ASSOCIATION

Demands of this kind are arising from within the membership of the American Hospital Association, and, as the primary national body covering the field of organized medical care, it seems fitting that the association should be equipped to render all advice and assistance possible along these lines. The effect of providing some definite service to its members, or to non-member organizations, or to communities interested in hospital and dispensary work, would tend not only to enlarge and strengthen the American Hospital Association itself, but to advance the scope and standards of the field of service in which it is interested.

Therefore, it is proposed that the American Hospital Association establish a service bureau, offering expert advisory and consultant service as to the establishment or conduct of dispensaries, and as to the needs and organization in a community of the various forms of hospital, dispensary, and medical or health services.

#### SCOPE OF SERVICE

Such a service would be offered primarily to the organizations which are members of the association, but would also be available, on certain terms, to public health or other organizations which are not members. In more detail, the scope of the proposed service would include such matters as the following:

1. Investigation or survey of communities to determine and recommend the extent and character of need for hospital beds of various types and the manner in which those facilities should be organized in relation to one another and to the public health department and to the social service facilities of the community.

2. Investigation of particular institutions to ascertain and recommend the best forms of establishment or development of out-patient clinics or social service functions.

 Advice and recommendations, or consultant service, concerning the construction, organization, or management of dispensaries or out-patient departments of hospital.

# ORGANIZATION OF BUREAU

This advisory and consultant service should be organ-

ized as a service bureau of the American Hospital Association, under the direction of the trustees. The general secretary of the association would, ex-officio, be general executive officer, as of all other branches of the administration of the hospital association.

#### STAFF

There should be designated by the trustees one or more consultants to serve as the staff of this bureau, in addition to such service as might be rendered by the secretary of the association and his office. These consultants may be engaged for a definite part of their time, or be compensated for time spent by them.

#### BRANCHES OF SERVICE

The service rendered by the bureau would include: (a) such advice as could be given by mail from the office of the association, or by the consultant staff of the bureau to whom the request would be referred, and (b) personal service, including visits to institutions or communities by the secretary of the association or by one of the consultant staff of the bureau.

#### METHOD OF ADMINISTRATION

Assignments of calls for the aid of the bureau to the members of the consultant staff would be made by the secretary of the association according to rules prescribed by the trustees. The organization requesting the service may suggest the name of the member of the consultant staff which it desires. Report should be made by the secretary in writing to the trustees once every three months, of all requests for services received, with the assignments made, time taken, and the financial income and outgo.

Members of the consultant staff of the bureau receiving requests directly should be under obligation to forward such requests to the secretary of the association before any response is sent to the inquiry.

#### FINANCES

The service of the bureau should be free to members of



Hotel Sinton, Cincinnati, Ohio

the association, except that charge for the actual traveling and other expenses of the consultants are to be paid by the organization or organizations receiving the service. To non-members of this association, the trustees shall fix such rates as seem proper. All fees received for the services rendered by the bureau should be paid into the treasury of the association and all compensation paid to members of the staff of the bureau and should be paid from it.

#### PUBLICITY

Announcements of this service bureau should be prepared, printed in the bulletin of the association, in The Modern Hospital, in other suitable professional journals or magazines, and in a leaflet for general circulation.

#### 1919 Convention

#### HOTEL RESERVATIONS

Members of the American Hospital Association and American Dietetic Association planning to attend the Cincinnati convention, September 8-12, 1919, should make hotel reservations at an early date. Hotel Gibson is the headquarters of the convention. The general sessions and the majority of the section meetings will be held in this hotel. Several section meetings will be held at the Cincinnati General Hospital and the University of Cincinnati Medical School. A number of section meetings will also be held in the Hotel Sinton which is located directly across the street from the Hotel Gibson. Following are the rates of the Hotel Sinton which are invariably adhered to and never advanced in connection with conventions:

and hever advanced in connection with convent	OIL	•	
OUTSIDE ROOMS			
One person			
Room with bath	\$3.50	to	\$6.00
Two persons—	4 70		= 00
Room with bath			
Room with bath and twin beds			
Two connecting rooms, bath between	1.00	to	10.00
Two connecting rooms, bath between	8 00	to	19 00
Two connecting rooms, bath between, one with twin	0.00	to	14.00
beds			10.00
Four persons-			
Two connecting rooms, bath between	9.00	to	12.00
Two connecting rooms, bath between, one or both with			
twin beds			12.00
COURT ROOMS			
One person-			
Room with bath	2.50	to	3.00
Room without bath	2.00	to	2.50
Two persons—			
Room with bath		to	4.00
Room with bath and twin beds			5.00
Room without bath	3.00	to	3.50
Two connecting rooms, bath between	4.50	to	6.00
Three persons—	0.00	4-	7.00
Two connecting rooms, bath between	6.00	to	7.00
beds			8.00
Four persons—			0.00
Two connecting rooms, bath between	7.00	to	8.00
Two connecting rooms, both with bath, one with twin		-	0.00
beds, but outside rooms			11.00
CORNER SUITES			
Parlor, bedroom, and bath			
Parlor, dining room, bedroom, and bath			
Additional bedrooms may be connected with the ten to suites.	nrtee	11 (	OHAT
suites.			

The hotel is conducted entirely upon the European plan. All rooms without private bath have lavatory with hot and cold water and free use of detached bath. When requesting reservation, it is important to state the number for whom accommodation is desired, the kind of rooms preferred, the date, and if possible, the hour of arrival.

Members of the association will receive literature concerning the city of Cincinnati, its hotels, its meeting places, its amusements, and places of interest. Complete information concerning the convention will be published also in the July and August bulletins of the association.

#### Commercial Exhibit

Fifty percent of the commercial exhibit space of the American Hospital Association and 25 percent of the space of the American Dietetic Association has already

been sold. The list of exhibitors and spaces assigned each are as follows:

Spa	ce No.
Thompsons Malted Milk Co	3
	1-2
J. Hungerford Smith Company	12
Royal Baking Powder Company	13
Mellins Food	
Meinecke & CompanyRoom II	
Thorner Brothers	
Lewis Manufacturing Company	
American Laundry Machinery Company	
Coast Products CompanyRoom VII	
J. B. Ford Company10	
J. B. Lippincott Company10	
Born Steel Range Company10	
Aluminum Cooking Utensil Company10	
Life Saving Devices Company	
Klearflax Linen Rug Company	
Pfaudler Company11	
Holtzer Cabot Electric Company11	
Columbus Aseptic Furniture Company20	
Genesee Pure Food Company20	
Max Wocher & Sons Company	
Albert Pick & Company	
Horlick's Malted Milk30	
Randal Faichney30	
F. A. Hall Company30	
Bromley Merseles Company30	
H. W. Baker Linen Company30	
F. S. Betz Company31	
Safety Anesthesia Company31	
Randles Manufacturing Company40	
Kimberley Clark Company40	2

#### Institutional Membership

The institutional membership campaign will be pushed forward rapidly. A communication has been sent to the 110 institutional members of the association whose applications have been approved by the membership committee which states that institutional members are entitled to appoint as their representatives in the association any person or persons who are eligible to active or associate membership in the association. Of these no more than three, including the superintendent, shall have all the privileges and authority of active personal members and shall be so designated; others so appointed shall be associate members. Active personal members are those who at the time of their election are trustees, superintendents, or assistant superintendents of hospitals, or members of the medical staffs of hospitals. personal members are those who at the time of their election are heads of any executive administrative or educational department of a hospital, except those already mentioned, or contributors to or members of any association or board the object of which is the foundation, maintenance, or improvement of hospitals, or the promotion of organized charities for the improvement of health.

Information Concerning the American Dietetic Association
The American Dietetic Association will hold its second
annual meeting in Cincinnati, September 8-12, 1919. The
headquarters will be at the Gibson Hotel, which is also the
headquarters of the American Hospital Association. The
registration office, commercial exhibits, and the majority
of sessions of the meeting will be on the mezzanine floor.

Two meetings of the executive committee have been held in New York City, one in January and one in April. At the last meeting, plans for the program were made as follows: The forenoon sessions on Tuesday and Wednesday are to be devoted to general meetings and round tables; the afternoon sessions will be devoted to specific subjects; the business meeting will be held Friday morning and a general meeting Friday afternoon.

Some points for special discussion are The Dietitian in Metabolism Work, Miss Minnie Phillips, Iowa University, Iowa City, chairman of the committee; The Teaching Dietitian, Miss Katherine Fisher, Teachers College, Columbia University, New York, chairman of the committee; The Social Welfare Dietitian, Miss Blanche Joseph, Chicago, chairman of the committee; The Administration Dietitian, Miss Emma Smedley, Philadelphia, chairman of the committee.



VINCENZ MUELLER, Technical Editor, GEO. W. WALLERICH, Associate Editor,

Please address items of news and inquiries regarding New Instruments and Appliances to the editor of this department, 327 Southeast Avenue, Oak Park, Illinois.

#### American-Made Ink Polygraph

During the last two years the demand for English-made Mackenzie polygraphs was more urgent than ever before. Regardless of the demand, however, all during the war only a few of these instruments were permitted to be exported to this country from England, because the British government needed practically all the instruments of this type that could be produced.

The demand from some of our specialists for this imported instrument was very insistent, and in some cases it was impossible to make our specialists believe that a most excellent instrument of this type is being manufactured right here in our country and has been on the market for a number of years.

In the accompanying illustrations the latest model of the American-made Mackenzie ink polygraph is shown. It is still impossible to supply the original English-made polygraph, but we know from experience that it is not necessary to put off important work on this account, because the instrument illustrated here is giving excellent service to many American scientists whom it was possible to induce to give the home product a trial.

It is well known that polygraphic tracings give information about the action of the right side of the heart and the condition of the heart muscles, especially the sino-auricular bundle. A record made by an ink polygraph is practical information and has an advantage over the smoked paper apparatus in that it avoids the uncleanly smoking and handling of the paper before taking records and the necessity for fixing them in a shellac solution for preservation.

The most important parts of the ink polygraph may be described as follows: The casing A containing the paper rolling and time-marker movements; the writing tambours B B B with supporting bar C; wrist tambour D with attachment E for strapping on to wrist; paperroll bracket F; pens G, G1, and G2, and time-marking pen H. The casing A contains the driving mechanism, either an electric motor with an electric time-clicker or a spring movement. The paper feed roller may be rotated at various speeds. The aluminum writing pen, called the time-marker, vibrates at a constant speed of 300 per minute, an equivalent to 1/5 of a second. The electric instrument is supplied with batteries of a standard make (Everready 734), which can readily be replaced when exhausted. Should it be desired to run the motor from regular electric service wires (110 volts), a rheostat or series-lamp circuit must be used, or the instrument may be operated by a storage battery of about 10 volts.

#### Bread-Slicing Apparatus

Although the war is over and our soldiers are being demobilized faster than anyone had expected, the demand for labor of every kind is unabated and the cost of getting the work done satisfactorily is higher than ever before. It is, therefore, necessary for the managers of institutions to be continuously on the look-out for labor-saving machinery to keep their institutions at the highest point of efficiency with the least possible number of employees.

A comparatively inexpensive machine, which may not be generally known, is a bread slicer, and we were not aware that such a device could save such a great deal of



Buffalo bread slicer.

time and at the same time so much bread as well, until we recently saw one at work in a restaurant.

This particular apparatus is marketed under the name of the "Buffalo Bread Slicer," and is made so that it will

cut bread that has just come out of the oven, and cut the loaf down to the last slice, thus saving from two to three slices on every loaf. The machine will cut about two hundred slices a minute, of any thickness, automatically, from 1/8-inch to 1/8-inch, stacking the bread at the same time, thus saving a great deal of time, as well as preventing the handling of the slices, a circumstance which renders it exceedingly sanitary.

The knife is so well guarded that it is impossible for operators to cut their



American-made ink polygraph

fingers. The knife can be easily sharpened in a few seconds with a small stone which is furnished with the machine.

### Self-Retaining Retractor for Use in Operative Bone Work

The so-called "open method" of treating fracture cases has brought electrically driven bone-surgery engines rapidly to the front, and today there are probably few hospitals of any consequence where one type or another of these apparatus has not been used.

There is no longer any question about the usefulness of these apparatus for preparing autogenous bone grafts,

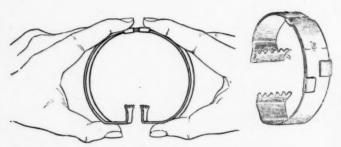


Fig. 1. (To right.) Lowman and Pratt's self-retaining retractors. Fig 2. (To left.) Showing application of retractor.

but it is a fact that in the hands of an inexperienced operator there is a certain amount of danger in their use, especially to the assistants.

To overcome this danger, Maj. J. B. Lowman and Capt. K. B. Pratt of the U. S. Base Hospital No. 38, devised the retractor illustrated below, and it is reported that great satisfaction is being derived from their use.

The retractor is made of two half circles of spring steel, fixed together by lateral clamps in the manner shown in Fig. 1. The tooth portions are wider than the rest of the bands, in order to give greater and more even retraction. The lateral bands act as a simple friction block, whose function is increased by any force exerted upon the two parts of the retractors, except exactly in the direction of its lock, by means of which the retractor is opened and closed (see Figs. 2 and 3).

In order to apply the retractors, the limb is lifted up and the retractor prongs sprung sufficiently to slip on from below and to lightly encircle the limb with the toothed edges placed on either side of the proposed line of incision.

It is necessary to use two retractors, and the toothed edges are made to engage to the depth of the wound, until the desired exposure is accomplished. The cut surfaces are beforehand covered by towels laid lengthways, and when the retractors are properly placed any unevenness of the protecting toweling is corrected.

When the operation is finished, the retractor is removed by pulling upward on the horizontal base of one-half, and pushing backward in a circular direction on the locking end of the other half, on the same side of the limb.

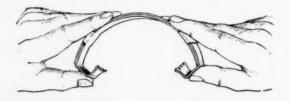


Fig. 3. Showing application of retractor.

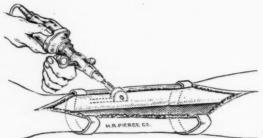


Fig. 4. Showing both retractors in position.

Figure 4 shows the retractor in position, without the toweling in place.

### Pressure Indicator for Kollman Dilators

Until recently Kollman dilators in the hands of the medical profession were equipped with only one scale (French) which indicated the dilation and with one knurled knob by means of which the dilator was opened and closed.

The new American made dilator, as illustrated, has a pressure gauge in addition. For this purpose the knurled head is made in two parts, one of which is directly fastened to the dilator handle, as it was in the old design. The other movable part is coupled to the former by a clock spring, which in turn is concealed in the hollowed-out fixed part of the knurled head. By turning the outer



American made dilator.

knurled knob, one turns one end of the clock spring, thereby increasing its tension until this tension becomes so great that it overcomes the internal resistance of the dilator.

If there is any angular dislocation of the parts of the knurled knob—one against the other—it is indicated by a scale, and the amount of the pressure causing this dislocation can be read by means of a pressure scale on the outer part of the knurled head.

A pointer is attached to the dilator handle in such a way that it easily permits reading the pressure scale.

The inner part of the knurled knob has a stop, which is arranged in such a way that the spring is always held under tension. This tension of the spring just overcomes the internal resistance of the dilator and handle.

In practical operation this is shown by the fact that there is no displacement or torsion of both parts of the knurled head in relation to one another when the dilator is opened or closed. The internal resistances are mainly composed of friction between moving parts of the dilators and of the force necessary to bend the lateral blades; this force is considerable in the Guyon dilator but is much less in the straight Kollman dilator.

#### Steel Pins and Large Spools of Thread Mean Economy

You will find it much cheaper to buy the large spools of thread for your sewing room. Safety pins are used a few times and disappear. Buy the steel instead of the brass pins. They fill the purpose just as well.

